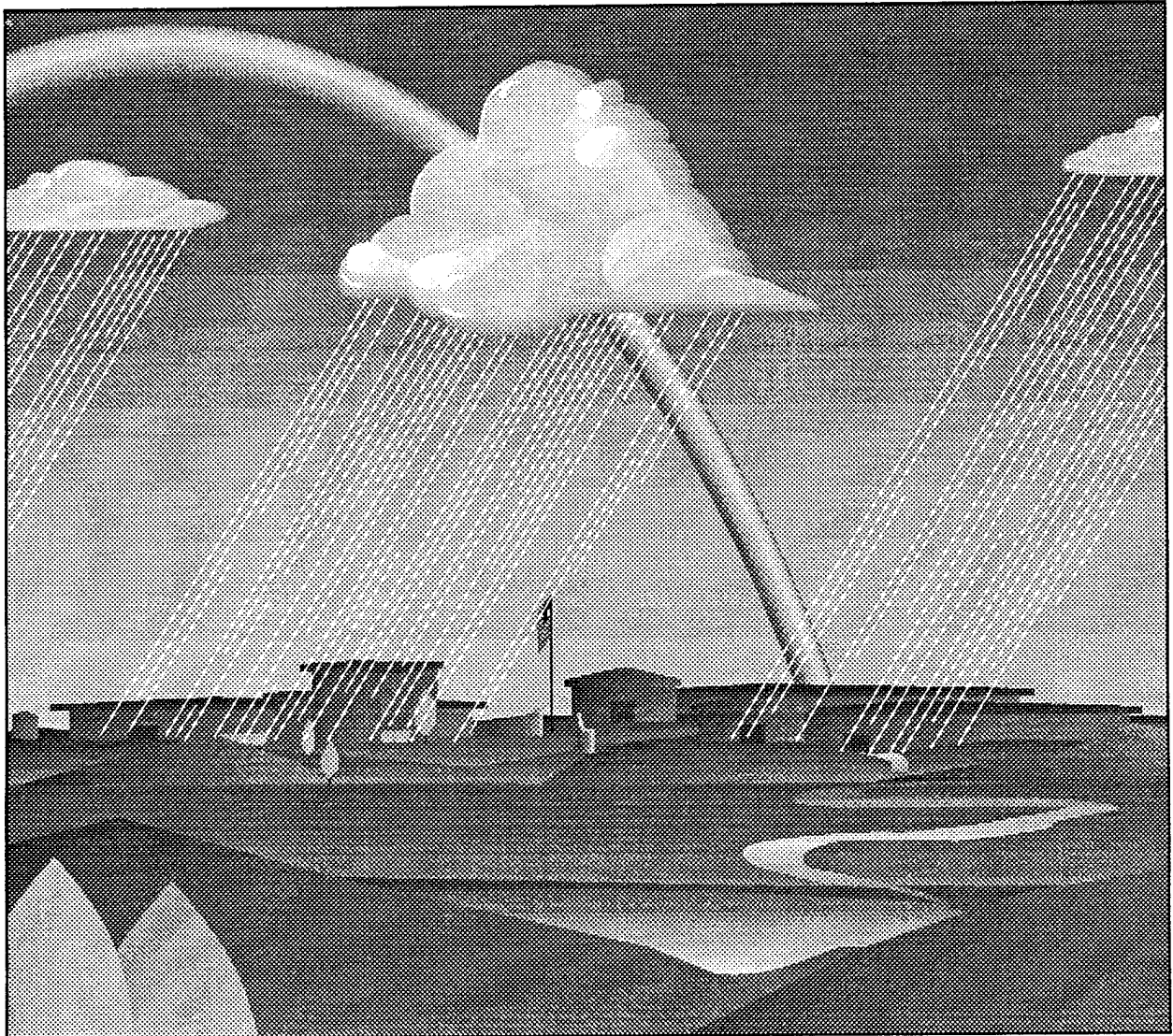


ARMY STORM WATER PERMIT IMPLEMENTATION HANDBOOK



19960709 001

Prepared by:

U.S. Army Environmental Center
Aberdeen Proving Ground
Maryland 21010-5101

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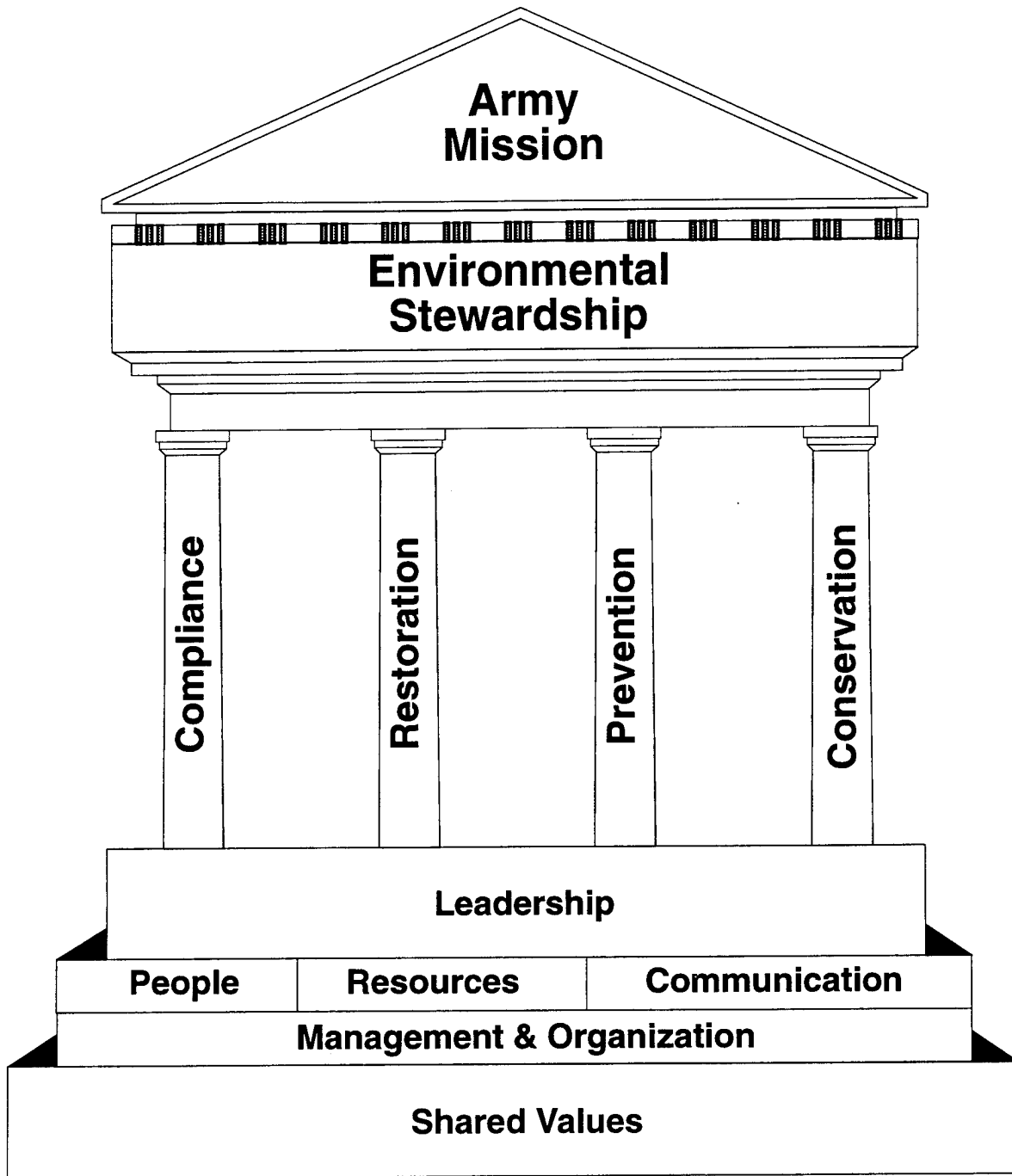
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ARMY STORM WATER PERMIT IMPLEMENTATION HANDBOOK

May 1994

U.S. Army Environmental Center
Aberdeen Proving Ground
Maryland 21010-5101

*Produced for the U.S. Army Environmental Center under contract
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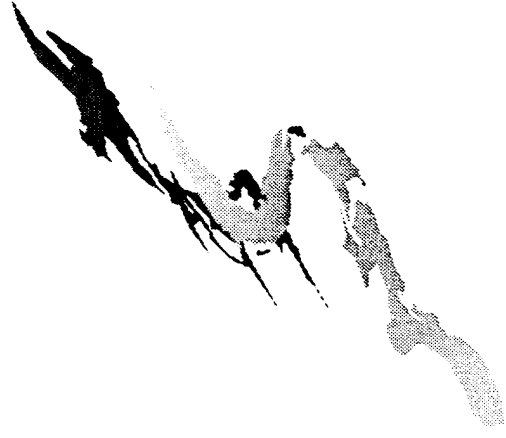


U.S. Army Environmental Strategy into the 21st Century

Storm Water Permits Overview

July 1994

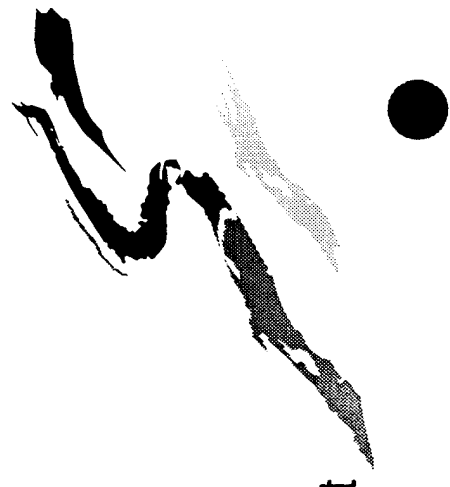
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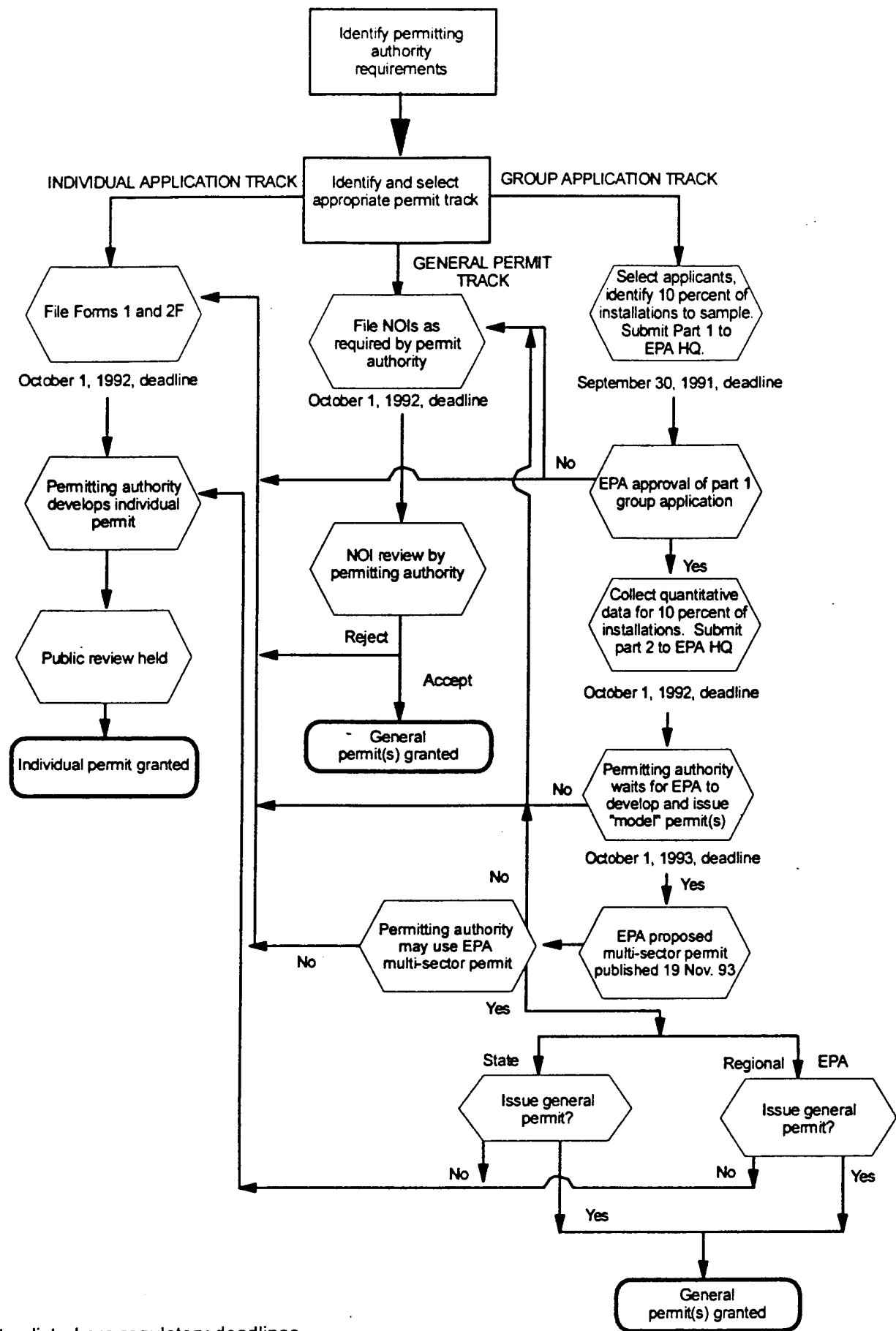


Quick Review

- 1990 - Storm water regulations issued by EPA
 - Determined applicability to Army installations
- 1991/92 - Submit permit applications for affected installations
 - Individual, General, or Group*
(regulator dependent)
- 1992/95 - Installations receive permit coverage
- 1993/94 - Develop SWPPPs
- Implement SWPPPs

* group members must re-file a permit application for coverage under either EPA/state general permit or EPA multi-sector permit.





Note: Dates listed are regulatory deadlines.

ARMY GROUP STATUS

(July 1994)

- Active Army Installations Remaining in Group: 26
- Reserve Installations Remaining in Group: 70

ARMY STATUS (July 1994)

States where Army is seeking:

• Individual Permits

- Alabama
- Missouri
- North Carolina (Fort Bragg)
- New Jersey (Active Army)
- Virginia* (Active Army)

• General Permits

- California
- Connecticut
- Georgia
- Iowa
- Maryland
- Minnesota
- Nebraska
- New Jersey (USAR)
- North Carolina (USAR)
- Pennsylvania
- Virginia (USAR)
- West Virginia
- Illinois (USAR)
- Ohio (USAR)
- North Dakota (USAR)
- Hawaii

*Virginia will add storm water requirements to existing NPDES permits upon permit renewal.

Permit Application Process

3 PATHS: INDIVIDUAL, GENERAL, GROUP

- **INDIVIDUAL**
 - Tailored to the installation
 - SWP3, BMPs, Monitoring/Sampling requirements
 - Expect more stringent/detailed requirements than in General permit
 - Costly to obtain and implement
 - Permit fees: \$100 - \$1,000/permit + annual maintenance fees
 - Use EPA Forms 1&2F or state equivalent
 - May be required by permitting authority
 - At any point in time
 - Individual option is always available
 - Least attractive to Army

Permit Application Process

3 PATHS: INDIVIDUAL, GENERAL, GROUP (Continued)

- GENERAL
 - EPA General permits and State General permits
 - Permit conditions pre-set and non-negotiable
 - Reduces administrative burden of regulator
 - File Notice of Intent (NOI) forms or state equivalent
 - General coverage notification:
 - Receipt of actual permit, or
 - Receipt of letter from regulator, or
 - Automatic coverage after NOI submission, if you are not contacted by regulator stating NOI is unacceptable

Permit Application Process

- EPA GENERAL
 - 2 General SW permits:
 - SW associated with Industrial Activity
 - SW associated with Construction Activity
 - No permit fee
 - EPA General permits apply only to Non-NPDES states and NPDES states without Federal Facilities authority

Permit Application Process

- STATE GENERAL
 - 2 or more General permits
 - States with more than 2 General SW permits (AL, KY, MS, MT, NC, ND, OR)
 - NPDES delegated and General Permitting Authority
 - Application fees likely
 - Range \$100 – \$500/permit
 - Annual maintenance fee
 - Many State General permits similar to EPA's General permits

TABLE 1
 FORSCOM/TRADOC/NDW/USAPAC/HSC/ISC/USMA INSTALLATIONS WITH SW PERMITS

PZ	FACILITY NAME	PERMIT TYPE	ADDRESS & PHONE NUMBER	CITY	ST	ZIP	MACOM
*1	KELLY SUPPORT FACILITY	General	AFKA-CK-EH, (412)777-1356/1173	OAKDALE	PA	15071	FORSCOM
*1	FORT DEVENS	Group	AFZD-EM, (508)796-3002/2195	FORT DEVENS	MA	01433-5000	FORSCOM
*1	FORT DRUM	Group	AFZS-EH-E (315)772-5708	FORT DRUM	NY	13602-5000	FORSCOM
*1	FORT INDIANTOWN GAP	General	AFZQ-FE-EN (717)865-8342	ANNVILLE	PA	17003-5000	FORSCOM
*1	FORT MCCOY	Group	AFZR-DE-E (608)388-2160	SPARTA	WI	54656-5000	FORSCOM
*1	FORT SHERIDAN	Group	AFZO-DE-M (312)926-2986	FORT SHERIDAN	IL	60037-5000	FORSCOM
*1	CARLISLE BARRACKS	General	ATZE-DIS (717)245-4040	CARLISLE BARRACKS	PA	17013-5002	TRADOC
*1	FORT DIX	Individual	ATZD-EH (609)560-3050	FORT DIX	NJ	08640-5501	FORSCOM
*1	FORT HAMILTON	Group	ATZDEH-FH (718)630-4410	BROOKLYN	NY	11252-5001	TRADOC
1	FORT MONMOUTH MAIN POST CHARLES WOOD EVANS AREA	Individual	Bldg 167	FORT MONMOUTH	NJ	07703	AMC
*1	US MILITARY ACADEMY	Group	MAEN-U (914)938-3224/4281	WEST POINT	NY	10996-1592	USMA
*2	FORT A.P. HILL	Part of VPDES Permit	ATZM-FHE-E (804)633-8255	BOWLING GREEN	VA	22427-5000	FORSCOM
2	FORT BRAGG	Individual	Bldg. 3-1634, Butner Road	FORT BRAGG	NC	28307-5000	FORSCOM

PZ	FACILITY NAME	PERMIT TYPE	ADDRESS & PHONE NUMBER	CITY	ST	ZIP	MACOM
*2	FORT CAMPBELL	Group	AFZB-DE-E (502)798-5428/3487	FORT CAMPBELL	KY	42223-5000	FORSCOM
*2	FORT PICKETT	NOI	AFZA-FP-E (804)292-2630/8503	BLACKSTONE	VA	23824-5000	FORSCOM
*2	FORT EUSTIS	NOI	ATZF-EH (804)878-2806/3509/2489	FORT EUSTIS	VA	2304-5332	TRADOC
*2	FORT STORY	NOI	Coordinate through Fort Eustis	FORT STORY	VA	23604-5332	TRADOC
*2	FORT GORDON	Existing NPDES covers SW	ATZH-DIE (404)791-2403/2459	FORT GORDON	GA	30905-5450	TRADOC
*2	FORT BEN HARRISON	Group	ATZI-IS (317)549-5383/5387	FORT BEN HARRISON	IN	46216-5000	TRADOC
*2	FORT LEE	NOI	ATZM-EP (804)734-1420	FORT LEE	VA	23801-5200	TRADOC
*2	FORT MONROE	NOI	AZIC-EH (804)727-3807/3269/3260	FORT MONROE	VA	23651-6720	TRADOC
2	FORT DETRICK	NOI	77 25' 1518' W; 39 26' 39.8290' N	FREDERICK	MD	21701-5000	HSC
*2	WALTER REED AMC	NOI	Bldg 1, 16th St N.W.	SILVER SPRING	MD	20814	HSC
2	FORT RITCHIE	NOI	Bldg 603, Lakeside Dr.	FORT RITCHIE	MD	21719-5010	MDW
2	FORT BELVOIR	NOI	Bldg. 1442, Jackson Loop	FORT BELVOIR	VA	22060-5113	MDW
2	FORT MCNAIR	GROUP	4TH & P STREETS S.W.	WASHINGTON	DC	20319-5050	MDW
2	FORT MYER	NOI	RTE 50 & PERSHING DRIVE	ARLINGTON	VA	22211-5050	MDW
2	CAMERON STATION	NOI	S. PICKETT ST. & DUKE ST.	ALEXANDRIA	VA	22304-5050	MDW

PZ	FACILITY NAME	PERMIT TYPE	ADDRESS & PHONE NUMBER	CITY	ST	ZIP	MACOM
2	FED REG CTR-OLNEY	NOI	5321 RIGGS ROAD	GAITHERSBURG	MD	20879	MDW
*3	FORT BUCHAWAN	GROUP	AFZK-B-FE (809)783-7251	GUAYNABO	PR	00934-5040	FORSCOM
*3	FORT GILLEN	NOI	Coordinate through Fort McPherson	FOREST PARK	GA	30050-5000	FORSCOM
*3	FORT MCPHERSON	NOI	AFZK-EH-C (404)752-3702	EAST POINT	GA	30330-5000	FORSCOM
*3	FORT STEWART	NOI	AFZP-FEC (912)767-4188	FORT STEWART	GA	31314-5000	FORSCOM
*3	HUNTER ARMY AIRFIELD	NOI	Coordinate through Fort Stewart	HUNTER ARMY AIRFIELD	GA	31409	FORSCOM
*3	FORT BENNING	NOI	ATZB-EH-E (404)545-4766/4957	FORT BENNING	GA	31905-5000	TRADOC
*3	FORT JACKSON	Group	ATZJ-EH (803)751-5011/4687	FORT JACKSON	SC	29207-5670	TRADOC
*3	FORT MCCLELLAN	Individual	AZTN-EH (205)848-3215/3758	FORT MCCLELLAN	AL	36205-5000	TRADOC
3	FORT RUCKER	Individual	ATZQ-DEH (205)255-5926	FORT RUCKER	AL	36362-5000	TRADOC
*4	FORT LEONARD WOOD	Individual	ATZT-AEH-E (314)596-6108	FORT LEONARD WOOD	MO	65473-5000	TRADOC
*4	FORT POLK	GROUP	AFZX-FEO (318)535-6578	FORT POLK	LA	71459-5000	FORSCOM
*4	FORT LEAVENWORTH	GROUP	ATZL-GEH (913)684-5661/5646	FORT LEAVENWORTH	KS	66027-5020	TRADOC
*4	FORT CHAFFEE	GROUP	ATZR-ZF (501)484-2516	FORT CHAFFEE	AR	72905-5000	TRADOC
*5	FORT HOOD	GROUP	AFZE-FE-EP (917)287-8754/8715	FORT HOOD	TX	76544-5000	FORSCOM

PZ	FACILITY NAME	PERMIT TYPE	ADDRESS & PHONE NUMBER	CITY	ST	ZIP	MACOM
*5	FORT SAM HOUSTON	GROUP	AFZG-DEH-E (512)221-4930/7842	FORT SAM HOUSTON	TX	78234-7000	FORSCOM
*5	CAMP BULLIS	GROUP	Coordinate through Fort Sam Houston	FORT SAM HOUSTON	TX	78234-7000	FORSCOM
*5	FORT BLISS	GROUP	ATZC-DEH-E (915)568-6200/7930/5502	FORT BLISS	TX	79916-5058	TRADOC
*5	FORT SILL	GROUP	ATZR-E (405)351-5842/2715/3705/3409	FORT SILL	OK	73503-5100	TRADOC
*6	FORT HUACHUCA	GROUP	CCH-FE (602)533-5215/3120	FORT HUACHUCA	AZ	85613-6000	TRADOC
7	YAKIMA FIRING CENTER	Individual	Not on contract	YAKIMA	WA	98901	FORSCOM
7	FORT RICHARDSON	GROUP	BLDG. 730 QUARTER MASTER ROAD	ANCHORAGE	AK	99505-5500	USAPAC
7	FORT WAINWRIGHT	GROUP	BLDG. 3015 MONTGOMERY STREET	FAIRBANKS	AK	99703	USAPAC
7	FORT GREELY	GROUP	BLDG 603 ARCTIC AVE	FORT GREELY	AK	99733	USAPAC
7	MAKUA MILITARY RESERVE	NOI	158 13 LONGITUDE 21 32 LATITUDE	SCHOFILED BARRACKS	HI	96857-6000	USAPAC
7	SCHOFIELD BARRACKS	NOI	158 03 LONGITUDE 21 30 LATITUDE	SCHOFILED BARRACKS	HI	96857-6000	USAPAC
7	FORT SHAFTER	NOI	158 13 LONGITUDE 21 22 LATITUDE	SCHOFILED BARRACKS	HI	96857-6000	USAPAC

PZ	FACILITY NAME	PERMIT TYPE	ADDRESS & PHONE NUMBER	CITY	ST	ZIP	MACOM
7	HELEMANO MILITARY RESERVE	NOI	158 02 LONGITUDE 21 32 LATITUDE	SCHOFIELD BARRACKS	HI	96857-6000	USAPAC
7	WHEELER ARMY AIRFIELD	NOI	158 02 LONGITUDE 21 28 LATITUDE	SCHOFIELD BARRACKS	HI	96857-6000	USAPAC
7	FORT RILEY	GROUP	BLDG 408	FORT RILEY	KS	66442-6016	FORSOM
*7	FITZSIMMONS AMC	GROUP	104 45 LONGITUDE 39 50 LATITUDE	AURORA	CO	80045-5000	HSC
*	FORT ORD	NOI			CA		
*	FORT IRVIN	NOI			CA		
*	CAMP PARKS	NOI			CA		
*	FORT HUNTER LIGGETT	NOI			CA		
	FORT LEWIS	Individual		FORT LEWIS	WA		
	FORT KNOX	Needs Permit					TRADOC
*9	FORT CARSON	GROUP	AFZC-FE-EE (719)579-2752/4828	FORT CARSON	CO	80913-5000	FORSOM

* Funds provided for development of SMPPP.
 GEN (ST) - State general permit
 GRP - Group application
 IND - Individual application
 NOI - Notice of intent
 N/A - Not applicable (i.e., permit not issued to date)

TABLE 2
USAR PARTICIPANTS IN THE USARC GROUP PERMIT

REVIEWER	FACILITY NAME	APPLIC TYPE	PERMIT TYPE	CITY	ST	ZIP CODE	PZ	ID NO.
USGS* X	AMSA 69 (O/M)	NOI	GEN (ST)	MILFORD	CT	06460-4337	1	1ABG3
USGS* X	AMSA 72 (G)	NOI	GEN (ST)	WINDSOR LOCKS	CT	06096-1107	1	1ABG1
USGS*	AMSA 68 (G)	GRP	N/A	LINCOLN	RI	02865-3799	1	1APG1
USGS*	AMSA SUB-SHOP 63	GRP	N/A	AUBURN	ME	05701-2599	1	1ATS1
Complete?	BELLMORE USARC/SUB-SHOP	GRP	N/A	BELLMORE	NY	11710-2499	1	17M07
Complete?	ERNIE PYLE USARC/AMSA 12	GRP	N/A	FORT TOTTEN	NY	11359-1016	1	17M25
Complete?	LOCKWOOD USARC	GRP	N/A	MALONE	NY	12953-9998	1	17M41
Complete?	STEWART FLD USARC/AMSA 4	GRP	N/A	NEW WINDSOR	NY	12553-9000	1	17M47
	AMSA 31 (G)	NOI	GEN(ST)	EDGEMONT	PA	19028-5099	1	1HN23
	AMSA 113 (G)	NOI	GEN(ST)	GREENCASTLE	PA	17725-0190	1	15N31
	AMSA 112 (G)	NOI	GEN(ST)	LOCK HAVEN	PA	17745-9742	1	1HN42
	AMSA 29 (G)	NOI	GEN(ST)	READING	PA	19607-2798	1	12N64
	AMSA 32 (G)	NOI	GEN(ST)	WILKES-BARRE	PA	18702-6726	1	12NGB
	MG J WORTS MEM AMSA 23	NOI	GEN(ST)	WILLOW GROVE	PA	19090-5110	1	12N77
USGS*	ECS/AMSA 65 (G) STORAGE	GRP	N/A	AYER/FT. DEVENS	MA	01433-5000	1	14FZ1
USGS*	CPL G M CRAIG AMSA 66 (G)	GRP	N/A	BROCKTON	MA	02401-5597	1	14FZ0
	AMSA SUB-SHOP (M)	NOI	GEN(ST)	MARCUS HOOK	PA	19061-4891	1	15NS1
	AMSA 2	GRP	N/A	HORSEHEADS	NY	14845	1	1DM33
USGS* X	SUB-SHOP/OMS(MASSENA)	GRP	N/A	MASSENA	NY	13662-2497	1	1DMS1
USGS* X	AMSA 9 (G)	GRP	N/A	DEWITT	NY	13214-1399	1	1DMG3
USGS*	AMSA 5 (G)	GRP	N/A	NIAGARA FALLS	NY	14304-1698	1	1DM51
USGS*	AMSA 8 (G)	GRP	N/A	SCHENECTADY	NY	12306-2184	1	1DMG6
USGS*	MAJ DW HOLLEDER AMSA 7(G)	GRP	N/A	WEBSTER	NY	14580-1789	1	1DM80
USGS*	BUTLER SUB-SHOP	NOI	NOT	BUTLER	PA	16001-2799	1	16N14
USGS	ECS/AMSA 103 (G)	NOI	NOT	FRANKLIN	PA	16323-2109	1	16NE2
	AMSA 104 (G)	NOI	NOT	GREENBURG	PA	15601-4998	1	16NG3
	AMSA 110 (G)	NOI	NOT	NEW CASTLE	PA	16101-1197	1	16NG4
	AMSA 105 (G)	NOI	NOT	OAKDALE	PA	15071-5009	1	16NG1
	AMSA 106 (G)	NOI	NOT	PUNXSUTAWNEY	PA	15767-1999	1	16NG5
	AMSA 39 (L)	GRP	N/A	FT WAYNE	IN	46804	1	4JG37
USGS	AMSA 42	GRP	N/A	BATTLE CREEK	MI	49017-3097	1	4JG15
LMI	AMSA 40 SUB SHOP	GRP	N/A	LANSING	MI	48912	1	4JG16
USGS	AMSA 40 (G)	GRP	N/A	LIVONIA	MI	48150	1	4JG40
USGS	AMSA 43 (G)	GRP	N/A	MUSKEGON	MI	49442	1	4JG43
USGS	AMSA 43; SUB SHOP 1	GRP	N/A	TRAVERSE CITY	MI	49684-3512	1	4JG18
USGS	SCHAFFNER USARC	GRP	N/A	AKRON	OH	44310	1	41600
USGS	USARC BRYAN, AMSA 72(G)	GRP	N/A	BRYAN	OH	43551	1	41602
USGS	AMSA 3 (G) (L)	GRP	N/A	CANAL FULTON	OH	44614	1	41603
USGS	AMSA 58 (G) SUB-SHOP	GRP	N/A	LIMA	OH	45804	1	41669
USGS X	AMSA 32 (L)	GRP	N/A	MACEDONIA	OH	44067-2022	1	41632
LMI		GRP	N/A					

TABLE 2 (cont'd)

USAR PARTICIPANTS IN THE GROUP APPLICATION

FACILITY NAME	APPLIC TYPE	PERMIT TYPE	CITY	ST	ZIP CODE	PZ	ID NO.
AMSA 72 (G)	GRP	N/A	PERRYSBURG	OH	43551	1	41672
AMSA 46(L)	NOI	GEN(ST)	MAYWOOD	IL	60153-2392	1	43646
AMSA 45	NOI	GEN(ST)	ORLAND PARK	IL	60462-4718	1	43645
AMSA 48	NOI	GEN(ST)	PEORIA	IL	61604-4788	1	43648
AMSA 51(L)	GRP	N/A	DEPERE	WI	54115	1	43651
AMSA 52(L)	GRP	N/A	EAU CLATRE	WI	54703-0523	1	43652
AMSA 50(L)	GRP	N/A	MADISON	WI	53704-4789	1	43650
AMSA 49/W OMS & DS-GS	GRP	N/A	MILWAUKEE	WI	53209-2594	1	43649
AMSA 29	NOI	GEN (ST)	DES MOINES	IA	50315-5899	1	47629
AMSA 27	NOI	GEN (ST)	STOIX CITY	IA	51106-5103	1	47627
AMSA 30	NOI	GEN (ST)	WASHINGTON	IA	52353-0091	1	47630
AMSA 28(L)	NOI	GEN (ST)	WATERLOO	IA	50703-9678	1	47628
AMSA 25	NOI	GEN (ST)	DULUTH	MN	55802-2497	1	47625
AMSA 24	NOI	GEN (ST)	FARIBAULT	MN	55021-0577	1	47624
AMSA 23 (G) (L)	NOI	GEN (ST)	ST JOSEPH	MN	56374	1	47623
AMSA 22 (G) FT SNELLING	NOI	GEN (ST)	ST. PAUL	MN	55111	1	47622
AMSA 52 SUBSHOP	GRP	N/A	HURLEY	WI	54534-0038	1	47653
AMSA 53	GRP	N/A	ONALASKA	WI	54650	1	47653
ONALASKA DS SHOP	GRP	N/A	ONALASKA	WI	54601	1	47406
GRENIER FIELD AMSA 63 (G)	GRP	N/A	MANCHESTER	NH	03103-7474	1	14K33
SFC NELSON V BRITIN SUB	NOI	GEN(ST)	CAMDEN	NJ	08105-2696	2	1BL05
SGT J W KILMER AMSA 21(G)	NOI	GEN(ST)	EDISON	NJ	08817-2487	2	1BL12
STORCK USARC/SUB-SHOP	NOI	GEN(ST)	NORTHFIELD	NJ	088225-239	2	1BL65
MG WM. STRYKER USARC/SUB	NOI	GEN(ST)	TRENTON	NJ	08619-3091	2	1BL75
AMSA 89 (G)	NOI	GEN(ST)	CHRISTIANSBURG	VA	24073-2516	2	1CS62
AMSA 90 (G)	NOI	GEN(ST)	CHESTERFIELD	VA	23832-2299	2	1CS63
CAPE HENLOPEN AMSA 84 (G)	GRP	N/A	LEWES	DE	19958-1593	2	15C16
AMSA 83 (M) CURTIS BAY	NOI	GEN (ST)	BALTIMORE	MD	21226-1790	2	15GM1
AMSA 107 (G)	NOI	GEN (ST)	CHARLESTON	WV	25313-1485	2	16U61
AMSA 102 (G)	NOI	GEN (ST)	CLARKSBURG	WV	26301-5000	2	16U61
AMSA 109 (G)	NOI	GEN (ST)	VALLEY GROVE	WV	26060-0135	2	16U64
AMSA 114	NOI	GEN (ST)	PARKESBURG	WV			
AMSA 122 (G)	GRP	N/A	CHARLOTTE	NC	28205-5124	2	2EJ11
AMSA 126 (G)	GRP	N/A	GREENVILLE	NC	27834-1276	2	28J26
AMSA 128 (M)	GRP	N/A	MOREHEAD CITY	NC	28557-4297	2	28J41
AMSA 126 (G) SUB-SHOP	GRP	N/A	WILMINGTON	NC	28405	2	28J71
AMSA 147 (G)	GRP	N/A	KINGSFORT	TN	37662-1305	2	2JR30
AMSA 36 (L)	GRP	N/A	EVANSVILLE	IN	47711	2	4JG36
AMSA 35	GRP	N/A	JEFFERSONVILLE	IN	47230	2	4JG35
AMSA 59 SUB-SHOP 1	GRP	N/A	CINCINNATI	OH	45237-3095	2	41G10
AMSA 56 (G)	GRP	N/A	COLUMBUS	OH	43215	2	41G10

TABLE 2 (cont'd)

USAR PARTICIPANTS IN THE USAR GROUP APPLICATION

FACILITY NAME	APPLIC TYPE	PERMIT TYPE	CITY	ST	ZIP CODE	PZ	ID NO.
AMSA 58 (G) (L)	GRP	N/A	FAIRBORN	OH	45324	2	41G58
AMSA 59	GRP	N/A	KINGS MILLS	OH	45034-0914	2	41G59
GEN M MAHON JR. AMSA 127	GRP	N/A	GREENVILLE	SC	29607-3299	3	28Q38
AMSA 121 (G)	GRP	N/A	NORTH CHARLESTON	SC	29418	3	28Q57
CULLMAN AFRC	IND/GRP	IND(ST)	CULLMAN	AL	35055	3	29A16
AMSA 145 (G)	IND/GRP	IND(ST)	HUNTSVILLE	AL	35805	3	29A32
FT J WRIGHT AMSA 151	IND/GRP	IND(ST)	MOBILE	AL	36605-3296	3	09A44
AMSA 44 (G)	GRP	N/A	JACKSONVILLE	FL	32212-0025	3	23D26
COL FM WILLIAMS AMSA 47	GRP	N/A	MIAMI	FL	33167-2698	3	23D40
ECS 50(G)	GRP	N/A	ORLANDO	FL	32812-5199	3	23D61
AMSA 51 (M)	GRP	N/A	ST. PETERSBURG BEA	FL	33706	3	23D01
TALMADGE WHIDDEN AMSA 52	GRP	N/A	TALLAHASSEE	FL	32304-3910	3	23D70
CLARENCE LOVEJOY AMSA 53	GRP	N/A	TAMPA	FL	33614-6493	3	23D72
AMSA 54 (G)	GRP/NOI	GEN(ST)	AUGUSTA	GA	30909-2898	3	23E10
ECS 43 (G)	GRP/NOI	GEN(ST)	FOREST PARK	GA	30050-5000	3	23EG1
AMSA 46 (G)	GRP/NOI	GEN(ST)	MACON	GA	31201-1399	3	23E48
AMSA 54	IND	IND(ST)	SPRINGFIELD	MO		4	
AMSA 55	IND	IND(ST)	ST. LOUIS	MO		4	
AMSA 57	GEN	GEN(ST)					
AMSA 149(G)	GRP	N/A	LAUREL	MS	39440-0469	4	29I37
CLARKSDALE USARC	GRP	N/A	LYON	MS	38645-9520	4	29I10
AMSA 16	GRP	N/A	N LITTLE ROCK	AR	72118-2206	4	5HA12
AMSA 20	GRP	N/A	BROKEN ARROW	OK	74012	4	5HK08
AMSA 39 (L)	GRP	N/A	TOPEKA	KS	66608	4	5CE62
AMSA 4 (L)/HOUSTON USARC	GRP	N/A	HOUSTON	TX	77041	4	5BT61
AMSA 5	GRP	N/A	SEAGOVILLE	TX	75159-3201	5	5XT72
AMSA 7	GRP	N/A	CORPUS CHRISTI	TX	78411-3905	5	5BT10
CORPUS CHRISTI USARC	GRP	N/A	CORPUS CHRISTI	TX	78411-3903	5	5BT62
AMSA 11 (L)	GRP	N/A	LUBBOCK	TX	79407-9654	5	5BT39
SAN ANTONIO USARC	GRP	N/A	SAN ANTONIO	TX	78209-6097	5	5BT33
AMSA 8	GRP	N/A	WACO	TX	76707	5	5BT57
JENKINS AFRC (AMSA 34)	GRP	N/A	ALBUQUERQUE	NM	87123-1093	6	58H02
GALLAGHER AMSA 12	GRP	N/A	LAS CRUCES	NM	88004	6	58H08
BARNES AMSA 17	GRP	N/A	PHOENIX	AZ	85008-3494	6	68A06
2LT R R LEISY USARC	GRP	N/A	SEATTLE	WA	98199-5000	7	66Q24
AMSA 9 (G)	GRP	N/A	VANCOUVER	WA	98661-3826	7	66Q62
GUAM HEROES MEMORIAL	GRP	N/A	NAVAL STATION	GU	96910-0000	7	PHG15
LUGENBEEL MALL	GRP	N/A	BOISE	ID	83702-4583	8	6FD02
AMSA 2 - JOHNSON MALL	GRP	N/A	POCATELLO	ID	83201-1954	8	6FD08
ROYSDON USARC	GRP	N/A	BILLINGS	MT	59102-5398	8	6FF02
AMSA 4 (G)	GRP	N/A	FT MISSOULA	MT	59801	8	6FF20
ECS 6	GRP	N/A	HELENA	MT	59624-1727	8	6FF24
ECS 1	GRP	N/A	FT DOUGLAS	UT	84113	8	6FP20

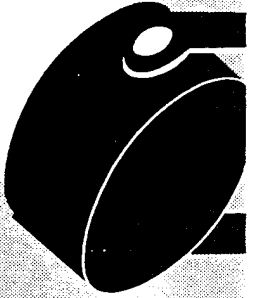
TABLE 2 (cont'd)

USAR PARTICIPANTS IN THE USAR GROUP APPLICATION

FACILITY NAME	APPLIC TYPE	PERMIT TYPE	CITY	ST	ZIP CODE	PZ	ID NO.
BROWNING USARC	GRP	N/A	OGDEN	UT		8	
AMSA 40	GRP	N/A	PARSONS	KS	67357	9	5CE63
AMSA 38	GRP	N/A	WITCHITA	KS	67210-1598	9	5CE56
AMSA 36 (L)	NOI	GEN (ST)	NORTH PLATTE	NE	69101-2399	9	5CG38
AMSA 35	NOI	GEN (ST)	OMAHA	NE	68108-3488	9	5CG22
AMSA 22 ROCKY MTN USARC	GRP	N/A	COMMERCE CITY	CO	80239-5301	9	6FC04
FT COLLINS AMSA 21 (G)	GRP	N/A	FT COLLINS	CO	80522-2185	9	6FC18
GRAND JCT ECS 42S	GRP	N/A	GRAND JUNCTION	CO	81505	9	6FC31
LEWIS & CLARK USARC	NOI	N/A	BISMARCK	ND	58501-7598	9	6FJ02
ECS 30G	NOI	GEN (ST)	DUBLIN	CA			
AMSA 11	NOI	GEN (ST)	OAKLAND	CA			
AMSA 12	NOI	GEN (ST)	SAN JOSE	CA			
AMSA 15	NOI	GEN (ST)	BELL	CA			
AMSA 14	NOI	GEN (ST)	FRESNO	CA			
ECS 16	NOI	GEN (ST)	LOS ALAMITOS	CA			
AMSA 19	NOI	GEN (ST)	SAN BERNADINO	CA			
AMSA 32(G)	NOI	GEN (ST)	VAN NUYS	CA			
AMSA 20	NOI	GEN (ST)	SACRAMENTO	CA			
AMSA FT BUCHANAN	NOI	GEN (ST)		PR			
AMSA JUANA DIAZ	NOI	GEN (ST)		PR			

MULTI-SECTOR PERMIT
HIGHLIGHTS

LMI



To Date...

- 16 November 1993** EPA representative Carmelita White introduced proposed multi-sector permit at Army IPR.
- 19 November 1993** EPA published proposed multi-sector permit in the Federal Register (Vol. 58, No. 222). Start of 90 day Public Notice Period.
- 26 January 1994** Army, Navy and Air Force representatives attend meeting hosted by Ed Miller, Office of the Deputy Under Secretary of Defense (ODUSD).
- 4 February 1994** Army designated lead agency in formulating DoD response.
- 17 February 1994** DoD comments submitted to EPA. Public Notice period ends.
- 22 March 1994** DoD wrap-up meeting.
- Fall 1994 ?** EPA to issue final multi-sector permit.



Multi-Sector Permit Highlights

- ▶ Overview
- ◆ 29 Industrial sectors covered under 1 permit
- ◆ Benchmark monitoring
- ◆ Multi-media compliance
- ◆ Visual examination of storm water quality
- ◆ Industry specific BMPs and training requirements
- ◆ No special monitoring requirements for SARA Title III, Section 313 facilities
- ◆ Region VI - TSD/F Exclusion
- ◆ Transportation definition all encompassing



Multi-Sector Permit Highlights

▶ Deadline

- 90 days to submit an NOI after permit is issued
- 90 days to transfer into the M-S-P from the general permit
- 270 days to develop and implement SWP3 after permit issuance
- No later than 3 years after permit issuance to implement controls that require construction
- To transfer out of group into an EPA general permit, the SWP3 must be already developed



Multi-Sector Permit Highlights

◆ Sector Coverage

- 29 Permit Sectors

- 15 sectors potentially applicable to the Army
- 17 out of 29 sectors require benchmark monitoring

- 12 sectors potentially applicable to the Army
- Requirements for co-located industrial activities are additive

◆ Army Concerns

- Sector applicability (an Army activity may fall under more than one sector)
- No minimum sector applicability cutoff levels (training or R&D purposes)
 - Interim activities; small quantity activities

**MULTI- SECTOR PERMIT SECTORS
POTENTIALLY
APPLICABLE TO THE ARMY**

15 out of 29 Permit Sectors:

- * C. Chemical and Allied Products Manufacturing Facilities
- D. Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers
- * E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
- * K. Hazardous Waste Treatment, Storage, or Disposal Facilities
- * L. Landfills and Land Application Sites
- * M. Automobile Salvage Yards
- * N. Scrap and Waste Material Processing and Recycling Facilities
- * O. Steam Electric Power Generating Facilities, including Coal Handling Areas
- P. Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and United Postal Service Transportation Facilities.
- * Q. Water Transportation Facilities with Vehicle Maintenance Shops/Equipment Cleaning Operations
- * R. Ship and Boat Building or Repairing Yards
- * S. Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas at Air Transportation Facilities
- * T. Treatment Works
- X. Printing and Publishing Facilities
- * AA. Fabricated Metal Products Industry

*12 out of 17 sectors with chemical monitoring requirements are potentially applicable to the Army.



Multi-Sector Permit Highlights

◆ Benchmark Monitoring

- Quarterly grab sampling in Year 2 of permit (and possibly Year 4 of permit)
- Based on group data, pollutants of concern were identified in each industrial sector
- Benchmark values are National Urban Runoff Program (NURP) median values [Conventional Pollutants], and Gold Book values for other pollutants

◆ Army Concerns

- Benchmark levels lower than drinking water maximum contaminant levels
- Benchmark values do not account for background groundwater contamination levels



Multi-Sector Permit Highlights

- ◆ Multi-media Compliance
 - Endangered Species Act (ESA)
 - National Historical Preservation Act (NIHPA)
 - National Environmental Policy Act (NEPA)
- ◆ Army Concerns
 - Extra undue burden
 - Applicability of New Source Performance Standards to Army
 - Whether impact to endangered species applies to entire installation (10,000 - 100,000 acres in size), or only to areas with storm water discharge associated with regulated industrial activities



Multi-Sector Permit Highlights

- ◆ Visual Examination of Storm Water Quality
 - Monthly or quarterly
 - Collect samples within the first 30 minutes of discharge
 - Observations of color, odor, clarity, solids, foam, oil sheen, and other obvious signs of storm water pollution
 - Same individual should carry out examination of discharge for lifetime of permit
 - Used to evaluate the effectiveness of the SWP3



Multi-Sector Permit Highlights

◆ Army Concerns

- Visual sampling from all outfalls within the first 30 minutes is not feasible due to the size of some installations
- Value-added of this requirement? More effective to conduct visual inspections
- Such examinations are subjective
- Investment of time and resources better applied elsewhere



Multi-Sector Permit Highlights

- ◆ Industry Specific BMPs & Training
 - Minimum requirements for good housekeeping and other non-structural BMPs
 - May list required structural measures (curbs, berms, exposure minimization practices)
 - "Must do" vs. "shall consider"
 - Required topics to be covered during training
- ◆ Army Concerns
 - Requirements are restrictive
 - Some requirements are inappropriate for Army facilities (industrial activities not conducted on a commercial scale, not primary function of installations)



Multi-Sector Permit Highlights

- ◆ SARA Title III, Section 313 Facilities
 - Special monitoring requirements eliminated
 - May allow individuals other than P.E.'s to certify SWP3
- ◆ Region VI TSDF Exclusion
 - EPA Region VI will not allow M-S-P coverage for TSDFs for permits issued in LA, NM, OK, and TX
- ◆ Army Concerns
 - Questions concerning threshold exceedances (whole installation-additive vs. individual sites) ● ●



Multi-Sector Permit Highlights

◆ Transportation Definition

- "The facilities covered by this section of today's proposed permit are commonly identified by SIC codes 40-43, and 5171, or *any other facility with vehicle and equipment maintenance shops or cleaning operations.*"

◆ Army Concerns

- All encompassing statement. EPA should establish minimum threshold quantities for sector applicability purposes (and limit definition to major vehicle maintenance operations/overhauls)

Multi-sector Permit: '+'s

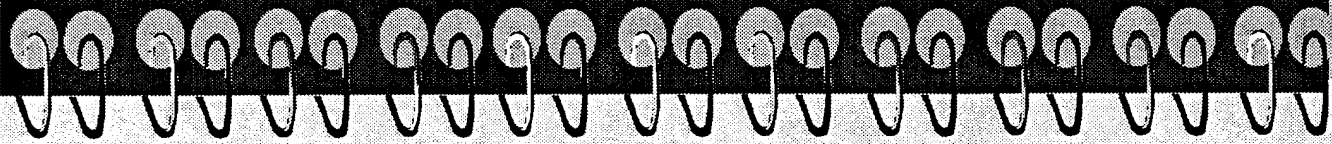
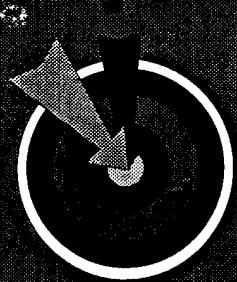
- Coverage under 1 permit as opposed to some states with many general permits
- Special monitoring requirements for SARA Title III, Section 313 facilities eliminated
- Criteria for airport monitoring based on quantity of de-icing chemicals used, rather than number of flights
- Benchmark monitoring allows for grab rather than composite sampling
- M-S-P not finalized yet (expect some changes in response to Public Notice comments)
- "Catch the Wave" (states may adopt M-S-P format upon permit renewals)

Multi-sector Permit: ''-''s

- Did not use Army submitted data
- NOI re-submission required
- Sector applicability: no cutoff limits, interim activities, training, R&D exclusions
- Benchmarks are stringent
- Multi-media approach
- Restrictive BMPs, training conditions
- Region VI TSDF exclusion
- 3 year time limit for construction projects
- Visual examinations: poor use of resources, time consuming, labor intensive
- Transportation definition is all encompassing

Army Storm Water Permit Implementation Handbook

Overview



Storm Water Handbook

- Ch 1: Environmental coordinator's role in program compliance
- Ch 2: Background regulatory information
- Ch 3: Current EPA status
- Ch 4: Current Army status
- Ch 5: Summary of standard permit conditions
- Ch 6: Permit compliance
- Ch 7: Running the program
- Ch 8: A look ahead

Storm Water Handbook

- Distributed to all installations w/i the next few months
- Provides information in a user-friendly format
 - 50 pages of text plus appendices
 - program support information
- Updated quarterly
- Supplemented with AEC newsletters, bulletins, information papers, etc...

*Army Program Support
Points of Contact*

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Multi-Sector Permit Highlights

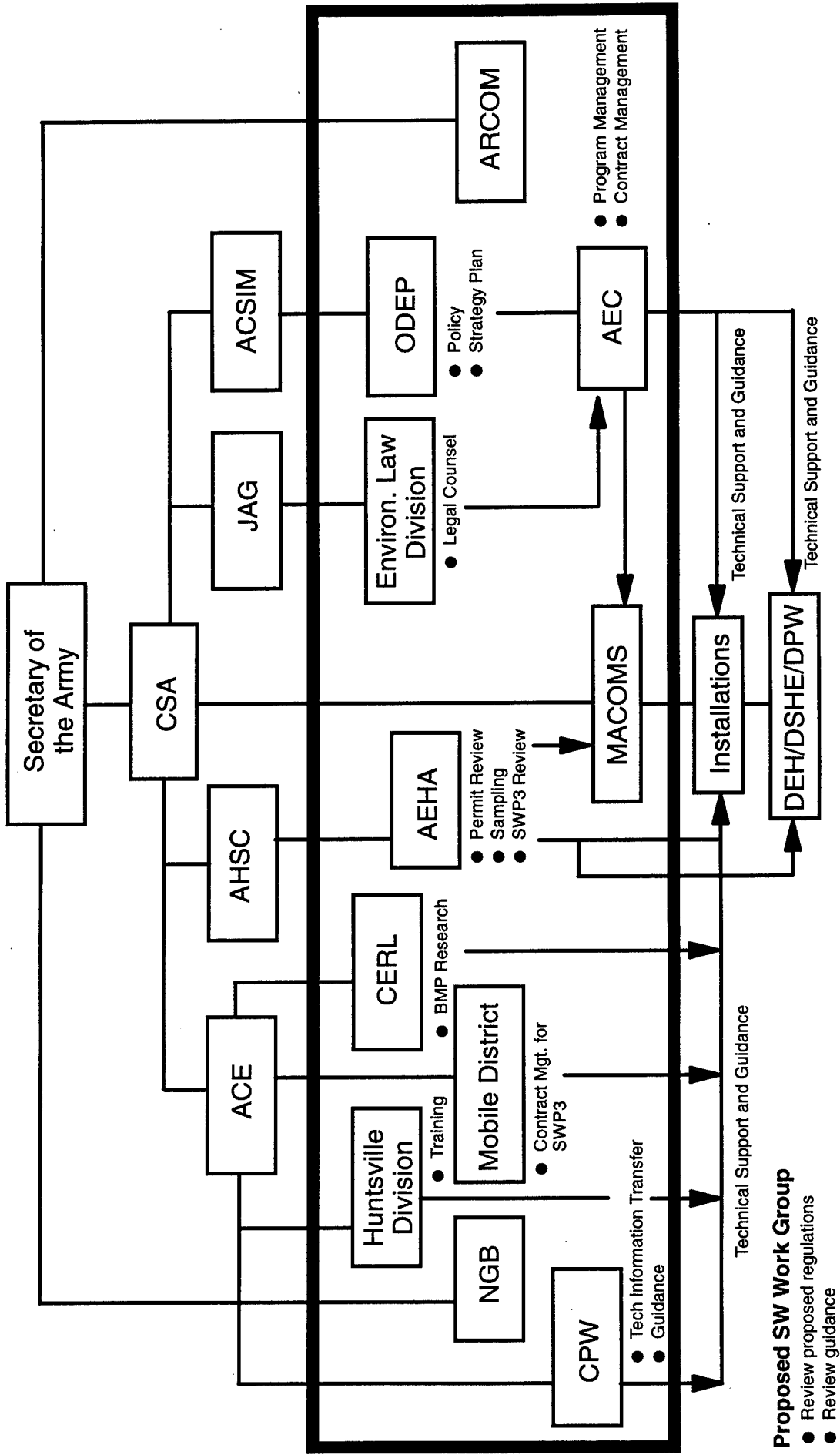
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◆ Army Concerns

- Benchmark levels lower than drinking water maximum contaminant levels
- Benchmark values do not account for background groundwater contamination levels

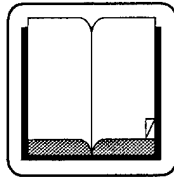
ARMY STORM WATER PROGRAM - FUNCTIONAL DIAGRAM



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JOAN ALBERG	SEATTLE	CENPS-EN-GT	206-764-3415	206-764-6795

Preface



This *Installation Handbook* is directed to commanders, environmental coordinators, and other personnel responsible for resolving storm water pollution problems at the installation level. It will serve as an aid in interpreting, implementing, and complying with Federal, state, and local storm water regulations associated with industrial activities. The overall objective of this handbook is to increase awareness and understanding of what is involved in complying with the conditions imposed by storm water permits.

The *Installation Handbook* is presented in 3-ring binder, tab format. Sections of this handbook will be updated as needed to reflect current events, and new or changed regulations and Army policies. This handbook will also be supplemented with monthly newsletters, bulletins, information papers, and memoranda from the Army Storm Water Steering Committee. Points of contact on the Steering Committee are provided under the section entitled "Program Support."

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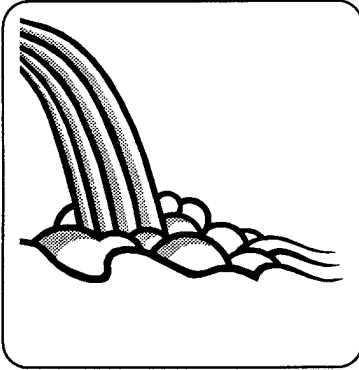
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CHAPTER 1

Overview



ROLE OF THE ENVIRONMENTAL COORDINATOR

The ultimate goal of the storm water permitting program is pollution prevention. Installations¹ must handle industrial materials in such a way that they do not mix with storm water runoff, thereby avoiding contamination that may affect the quality of water in the United States. The following subsections outline a set of actions the installation environmental coordinator must take to comply with the current storm water regulations for industrial activities. Each of those actions is discussed in detail in subsequent chapters. This guide covers only storm water asso-

ciated with industrial activities; storm water associated with construction activities is not covered in this document.

Apply for a Storm Water Permit

Either the Army Environmental Center (AEC) or someone from your installation should already have applied for a National Pollution Discharge Elimination System (NPDES) permit for storm water discharges occurring on site from regulated industrial activities. In Chapters 2, 3, and 4 of this manual, we present a detailed description of the NPDES storm water application process as well as the current status of Army applications.

Comply with the Permit

Permit compliance means taking those actions that are needed to fulfill permit conditions. The basic premise of this permitting program is to prevent contamination from the source. To do that, all permits require the development and implementation of a storm water pollution prevention plan (SWP3), and each installation will be required to prepare such a plan. That plan will describe the management methods that the installation will use to prevent source materials from coming into contact with storm water. These practices are called "best management practices" (BMPs). It will also list the persons responsible for implementing those materials management methods. Chapter 5 of this guide describes permit requirements in greater detail, and Chapter 6 addresses permit compliance issues.

¹In this handbook, the term "installations" refers to Active Army installations and Reserve Army facilities.

Although installation personnel are responsible for the SWP3, contractors will probably write the plan. AEC has contracted with the U.S. Army Corps of Engineers (USACE) Districts to produce many of the required installation plans. Depending on your District, USACE is either preparing the plan or is subcontracting the work to an architect/engineering (A/E) firm. Much information exists on SWP3s. Chapters 5 through 7 of this handbook discuss pollution prevention plans.

Basic compliance requirements include the following:

- ◆ Developing a site-specific SWP3 that does the following:
 - ▶ Identifies existing structural and nonstructural pollution prevention controls (otherwise referred to as BMPs).
 - ▶ Identifies recommended BMPs.
- ◆ Implementing the SWP3.
- ◆ Monitoring storm water discharges and sampling them if required. The permit may require that storm water runoff from certain activities be monitored periodically (see Chapters 5 and 6).
- ◆ Satisfying reporting requirements.

Chapter 7 addresses the specific details of what is involved in running a storm water program, including the roles of the principal Army participants.

Update the SWP3 and Maintain Facility Records

The SWP3 program entails considerable paperwork. Record maintenance is time consuming but necessary. Your pollution prevention program will be evaluated principally in terms of how well you conform to your own plans. Maintain the pollution prevention plan's effectiveness and accuracy by updating it annually and modifying it as required by your permit conditions. Updating plans, facility information, and personnel data; recording specific events; and preparing documentation are all part of record maintenance (refer to Chapter 5).



Avoid Receiving Notices of Violation

Notices of violation (NOVs) and other enforcement actions create a poor image for the Army in terms of not meeting its environmental objectives, as showcased in the four pillars of excellence described in *U.S. Army Environmental Strategy into the 21st Century*. As the environmental coordinator for the

installation, one of your goals is to comply with the storm water regulations, and minimize the number of storm water NOV's received. A detailed discussion on NOV's can be found in Chapter 6. Recognize that the primary reason for which you can receive an NOV under this program is the *failure to adhere to your own SWP3*.

Be Aware of Current and Future Regulations

Stay informed! You are responsible for keeping current on new regulations, and on how they may affect your installation. For example, a recent Executive Order requires Federal Facilities to comply with the Emergency Planning and Community Right to Know Act (EPCRA) of 1986 [otherwise referred to as the Superfund Amendments and Reauthorization Act (SARA) Title III]. That Executive Order affects not only the hazardous waste materials coordinator but also the storm water coordinator because of special storm water requirements for those facilities subject to SARA Title III, Section 313 requirements. Know the regulations and their implications, and you will be more successful in budget planning and allocation of limited resources. Proposed new storm water regulations will increase the responsibilities of the installation storm water coordinator. Be proactive! For a preview of what lies ahead in storm water regulations, see Chapters 3, 5, and 8.

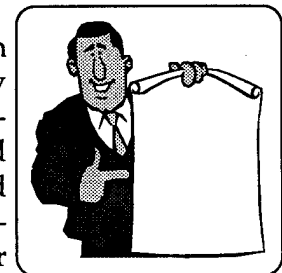
Plan Storm Water Expenses and Budget Accordingly

Your interests are best served by providing accurate and comprehensive storm water project proposals for the DB (data base) 1383 system (otherwise known as the A-106 report). Make your proposals accurate in terms of the funding needed to implement installation storm water projects (e.g., BMPs), and in terms of the priority classification for funding. Also, make those proposals comprehensive in terms of the number of projects that need funding. By staying current on future regulations, you can better forecast what projects would require DB 1383 funding over the next 8 years. Unless your projects are listed in that system, you can expect difficulty in obtaining the needed funding. The AEC will be issuing storm water DB 1383 guidance shortly.



Practice Pollution Prevention

We cannot stress enough the importance of pollution prevention. Storm water sampling data taken by the Army Environmental Hygiene Agency (AEHA) at various installations have shown that facilities with strong, well executed RCRA (Resource Conservation and Recovery Act) and SPCC (Spill Prevention Control and Countermeasures) programs had cleaner sites and therefore fewer storm water



contamination problems. Part of pollution prevention is awareness. Awareness of storm water problems may be generated through personnel training and visual reminders, such as signs and posters. Awareness can also be promoted through inspections conducted by the environmental staff and the installation command staff. Chapter 5 details basic pollution prevention measures such as BMPs.

ROLE OF THE INSTALLATION COMMANDER

The environmental coordinator's job can be made easier and more effective with the active support and cooperation of the installation commander. Experience has shown that such support promotes effective environmental management and compliance with rules and regulations by all levels of personnel. The installation commander has four roles: signatory authority, resource authority, moral authority, and leadership.

Signature Authority

Signatory requirements are clearly referenced in the NPDES permit. For a Federal agency, all applications, pollution prevention plans, reports, certifications, or other information submitted to regulators must be signed by either a principal executive officer (i.e., the installation commander) or ranking elected official. The base commander can delegate these responsibilities to a "duly authorized representative" such as the environmental coordinator. (That delegation must be in writing.) However, as the highest ranking official at the installation, the base commander still faces personal criminal liability for actions taken under this permit. That fact alone provides the commander incentive for having interest in Directorate of Engineering and Housing (DEH)/environmental activities.² Specific signatory requirements are discussed in Chapters 5 and 6.



Resource Authority

Commanders provide or allocate the resources needed by the environmental staff to implement the storm water program. Commanders should ensure that resources are *not* spent on just any "environmental" project. Monies should be spent wisely and allocated to justifiable projects with good payback and long-term benefits. No matter how hard the environmental staff try to meet regulatory requirements, they and the installation will fail if needed funds are not provided.

²At many installations, DEH may now be referred to as the Directorate of Public Works (DPW).

Moral Authority

The attitude of the commander is important since it is projected throughout the organization. The commander should provide a proactive atmosphere that supports environmental efforts, not merely because it is required but because it is the right thing to do. Such support sets a high moral tone and presents an atmosphere of excellence. By contrast, a focus on merely meeting “the regulations” presents an atmosphere of minimal performance and doing just enough to get by. A supportive commander provides incentive for all levels of personnel to respect and cooperate with the actions and directives initiated by the environmental staff. Positive support shows the environmental staff that what they do can make a difference.

Leadership

The installation commander’s responsibility is to execute the Army’s vision, as stated in the *U.S. Army Environmental Strategy Into the 21st Century*. Leadership direction and support are needed to implement improvements in all facets of Army activities and operations to achieve environmental stewardship. Environmental directives must be communicated through the chain of command and Army leaders will ensure their effective implementation.³ The strategy identifies six ways in which commanders can help execute Army environmental activities:

- ◆ Commit the chain of command
- ◆ Organize for success
- ◆ Spread the environmental ethic
- ◆ Train and educate the force
- ◆ Prioritize Army resources
- ◆ Harness market forces.



³U.S. Army Environmental Strategy into the 21st Century, 1992.

CHAPTER 2

Storm Water Regulations

BACKGROUND



The 1987 Clean Water Act (CWA) amendments require the U.S. Environmental Protection Agency (EPA) to develop regulations for storm water discharges associated with industrial activity. Pursuant to Title 40, Code of Federal Regulations (CFR) Parts 122 - 124, EPA published the NPDES permit application regulations for storm water discharges final ruling in the 16 November 1990 Federal Register (Vol. 55, No. 222). Any point source discharge of "storm water associated with industrial activity" entering waters of the U.S. must be authorized by an NPDES permit, or must seek an exemption where applicable.

Some EPA-funded studies (e.g., *National Water Quality Inventory, 1988 Report to Congress, Nationwide Urban Runoff Program*) concluded that pollution from diffuse sources, such as runoff from agricultural areas, urban areas, and construction sites, is the leading cause of water quality impairment. The NPDES storm water regulations are directed toward improving water quality by reducing pollutants in storm water runoff.

The EPA is taking a four-tiered, two-phase long-term approach in its regulation of storm water. The four tiers are described in Chapter 8. EPA is currently in Phase I, which involves regulating the most serious storm water discharges – those associated with industrial activities. The phrase "storm water runoff associated with industrial activity" covers storm water runoff from the following regulated activities: manufacturing [Standard Industrial Classifications (SIC) 20-39]; transportation (SIC 40-45, 5171); mining; scrapyard, salvage; steam electric power generating plants; landfills, land-application sites; wastewater treatment facilities (design flow greater than 1 million gallons per day); and hazardous waste storage, treatment, or disposal activities. Under Phase I, EPA also regulates storm water discharges from construction activities classified as "associated with industrial activity" (see Appendix A for a list of industrial activities covered under this phase of permitting).

It is important that environmental coordinators realize regulators are currently targeting only those industries they feel have the potential to contaminate storm water runoff. This is the intent of Phase I. Regulators will eventually seek to control runoff from other sources such as agricultural lands, parking lots, auto repair facilities, and other small commercial operations (e.g., local gas stations). The prevalent misconception is that the existing regulations are all-encompassing. They may eventually include all sources, but remember, Phase I

rules cover only certain industrial activities (those mentioned in the preceding paragraph).

Standard Industrial Classification codes are numeric codes developed by the Office of Management and Budget for use in classifying establishments by the type of activity in which they are engaged. Such codes cover entire fields of economic activity, including manufacturing, agriculture, transportation, wholesale trade, retail trade, recreation, services and public administration among others. Each establishment is classified according to its primary activity. These classifications make it possible for government agencies to tabulate, analyze and publish data on any given division, major industry group, or subset of the group.

Most Army installations are classified under Industry Group 9711 – National Security. Military hospitals are classified in Services Industry Group 806. Even though the military has its own unique SIC codes, for the purposes of these storm water regulations, some of the activities conducted at many Army installations are considered equivalent to industrial sector SIC Codes 20-39, 40-45, and 5171. In general, EPA and the States require NPDES permit coverage for all Federal, state, and local government-owned facilities that discharge storm water associated with any of the industrial activities described above.



ARMY INSTALLATIONS SUBJECT TO STORM WATER REGULATIONS

Army installations conducting any regulated industrial activities from which a point source discharges storm water to surface waters of the United States or to Municipal Separate Storm Sewer Systems (MS4s) must have a storm water permit. Examples of regulated installation activities include storm water from vehicle maintenance areas, open-burning and open-detonation sites, airfields, loading and unloading areas, and hazardous waste facilities. A detailed listing of typical activities on major Army installations that may require permit coverage under storm water regulations is presented in Appendix B.

In 1991, the Army Environmental Center (formerly THAMA – Toxic and Hazardous Materials Agency) assisted the Major Army Commands (MACOMs) in identifying those installations that need a permit and in selecting permitting strategies. By now, with the exception of some Army Reserve Units and possibly some National Guard Bureaus, installations that needed to apply for a storm water permit have already done so. The Army is currently in the process of applying for permit coverage of all regulated reserve units. However, as State programs evolve, installations may elect or be required to shift from one type of permit to another, either from a Federal permit (baseline general or group) to a

state permit (general or individual), or from a state general permit to an individual permit.

FEDERAL AND STATE REGULATORS

Storm water permitting authority may or may not have been delegated to your state. The issue is one of primacy, i.e., which government (state or Federal) has primary authority over the storm water program. States are in charge of implementing the storm water regulations if they have a delegated NPDES program, general and/or individual permitting authority, and Federal facilities permitting authority. However, EPA regional offices are in charge of implementing the storm water regulations in nondelegated states. In Appendix C, we provide a list of the appropriate permitting authorities as of March 1994. *You must know the regulating authority and have a point of contact at the state or Federal level, depending upon who has program primacy.*

The availability of permitting options is a primary difference between Federal and state programs. Under the Federal program, EPA has issued two NPDES general permits: storm water associated with industrial activity (not including construction), and storm water from construction activities classified as associated with industrial activity. An installation located in a state in which the Federal government is the lead regulating authority has three permitting options: seek coverage under one or both of the EPA general permits, request individual permit coverage, or participate in the group permit process (leading to coverage under the multi-sector permit).



Options under state-delegated authority are more complicated. The states may have made available a variety of general permits based on industrial activity, as opposed to just the two general permit types issued by EPA. States such as Alabama, Kentucky, North Carolina, and Oregon have all issued a variety of general permits segregated by activity type. Alabama, for example, has 12 industry-specific general permits and requires a facility to seek coverage under every applicable general permit. In this situation, a facility may end up dealing with numerous general permits. Kentucky, on the other hand, requires you to choose the most applicable one of the eight general permits available. Some States will not recognize the group permit process, and you must seek other alternatives. The implications of being involved in the group permit process are complicated and are discussed further in the next chapter. Appendix D lists the permitting options available in each state. *Individual permit coverage is always an option regardless of the regulating authority.*

THE PERMITTING PROCESS

Installations requiring a permit under the storm water regulations must file an application and pay any applicable application fee. Provided below is a summary of the various application processes and types of NPDES storm water permits available. Storm water permits are usually good for 5 years (permit duration), after which the permit must be renewed.

Application Procedures



An overview of the three permit application processes (Individual, General, Group) is shown in Figure 2-1.

INDIVIDUAL

The individual application track is straightforward (Figure 2-1, left). Forms 1 and 2F are filed with the permitting authority. The regulators will write a draft permit and initiate public notice procedures.

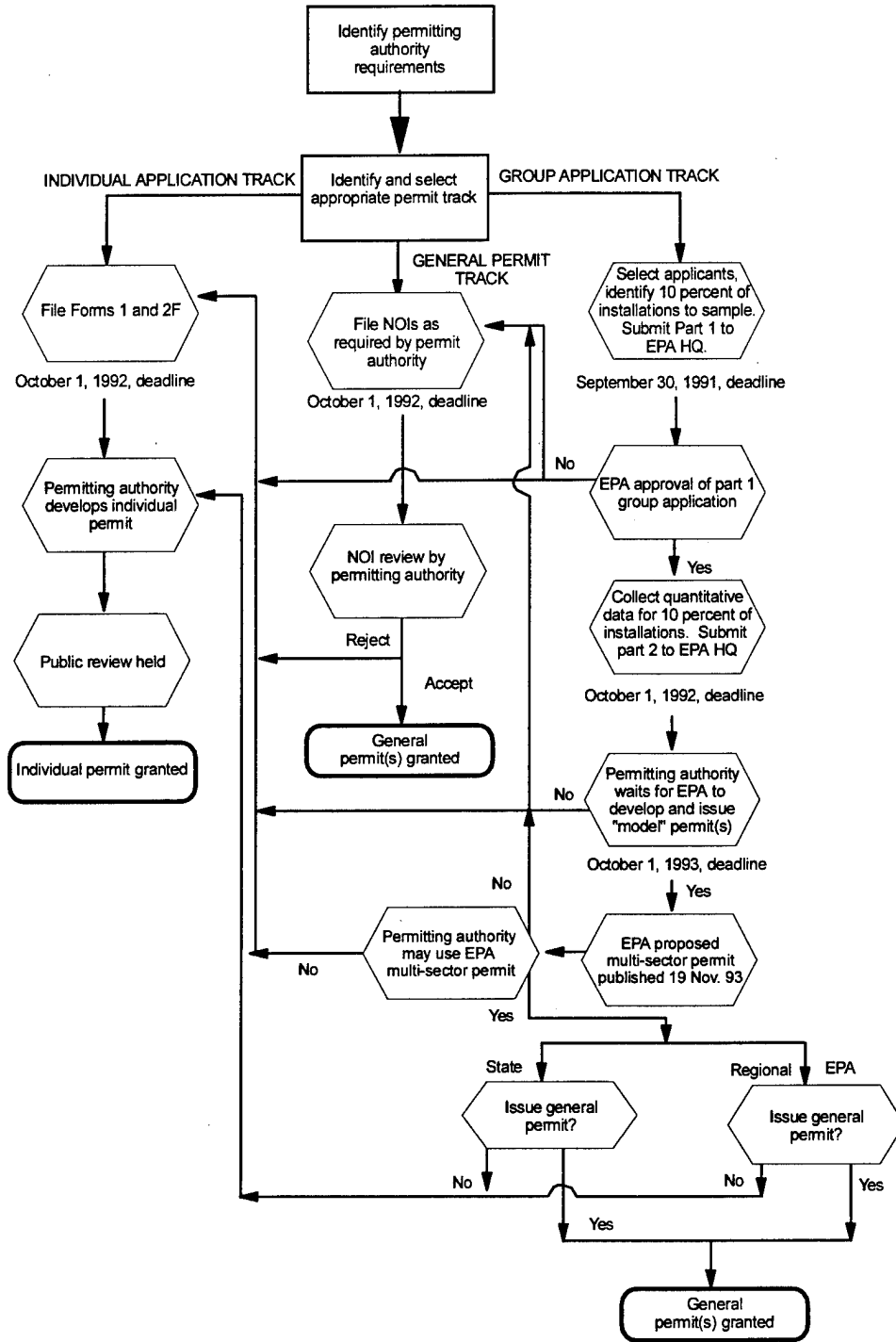
After the permit is finalized, it will be issued to your installation.

GENERAL

Figure 2-1, center, shows the track for obtaining a general permit from NPDES states or an EPA general permit from non-NPDES states. Under that track, you file an EPA notice of intent (NOI) or state equivalent as required by your permitting authority. The regulator will review your application and if it is accepted, your installation will be allowed to discharge under a general permit. Under the general permit track, all permit conditions are known since they are set and have been published in the state/Federal register. General permits differ from individual permits because they have already been drafted and reviewed through the public notice process. If the general permit application is rejected, you will be required to file an individual application. In most cases, the general permit is effective 48 hours after an NOI is filed unless the regulatory agency objects to your application.

GROUP

The group application track (Figure 2-1, right) is the most complicated of the three paths. The idea was that similar facilities would file together and create a "representative group." As part of a group, application sampling is minimized to 10 percent of the total applicants of that group. EPA must approve all group applicants (Part I of application) and receive sampling data for 10 percent of the members (Part II of application). The deadline for EPA group application approval was 1 October 1992. Any groups approved by EPA would then wait for



Note: Dates listed are regulatory deadlines.

Figure 2-1.
Storm Water Permit Application Flowchart

EPA to develop its model permits. The original intent was that EPA would develop model permits specifically tailored to each group by 1 October 1993. The models would be forwarded for review to state and regional authorities. At those levels, the model can be used in whatever form the authorities wish. It can be tailored and issued to installations in the state or region as a general permit or it can be used as the basis for drafting individual permits.

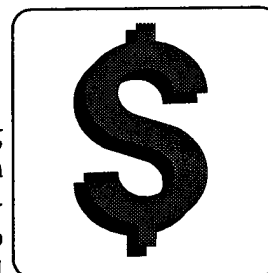
Group applicants are currently in a state of limbo. The 1 October 1993 deadline for which all facilities were required to have a permit has passed without EPA distributing the model permits. Technically, all group participants are now operating without a storm water permit. As time elapses, many states will no longer recognize or accept the EPA-approved groups. States will then force group applicants to choose an alternative permitting track.



On 19 November 1993, EPA's proposed *multi-sector* permit was published in the Federal Register (Vol. 58, No. 222). Because of the overwhelming number of group applicants, EPA altered its group approach. As opposed to issuing model group permits, EPA issued one multi-sector permit that addressed 29 industrial sectors. EPA believed that all the group applicants would be covered in at least one, and possibly many, of the 29 industrial sectors. The public notice period ended on 17 February 1994. All interested parties, including the Department of Defense, are now awaiting the final version of this multi-sector permit. A summary of the proposed multi-sector permit requirements and current Army status is provided in the following chapter.

PERMIT FEES

In many cases, a fee may be associated with obtaining a permit. EPA-regulated states usually do not charge an application fee, while state run programs may charge anywhere from \$100 to \$500 for a general permit and \$500 to \$1,000 for an individual permit. In addition to the initial permit fee, your state may require an annual maintenance fee. Check with your permitting authority.



PERMIT RENEWALS

A permit is good from the effective date of the permit until the permit expiration date, which is usually a 5-year term. There is no guarantee that permit conditions will remain the same as they are today. With EPA's tiered permitting strategy, expect to see major changes in your permit upon permit renewal.



NPDES STORM WATER PERMITS

The application process consists of three routes or tracks – individual, general and group – leading to two types of permits: the individual permit and the general permit. Chapter 4 describes the Army's current status in the permit process.

Filing an individual application (EPA Forms 1 and 2F or state equivalent), will result in the receipt of an individual permit (typically after negotiations with your permitting authority).

Individual permits are tailored to the facility, generally include detailed monitoring requirements, and are usually more expensive to implement. Requirements found in an individual permit can usually be negotiated with the regulators during the draft/public notice period. When an individual permit is issued, you will receive a copy of the permit, with its effective date and expiration date listed on the first page.

Filing a general application (NOI form or state equivalent) will result in the receipt of a general permit or, in some cases, an individual permit. Regulators may decide that general permits are not appropriate in your situation and may issue you an individual permit instead. See Appendix E for a look at EPA's general permit.

General permits are attractive because they are typically generic, usually less stringent, and less expensive to implement than individual permits. Requirements found in a general permit have already been established and are typically not negotiable. You may not "receive" a copy of the general permit; many states publish the general permit in the state/Federal registers and send you a letter telling you to abide by the conditions of that permit.

Filing as part of a "group" application (EPA Forms 1 and 2F) will result in the receipt of a general or an individual permit tailored to your group. EPA allowed facilities with similar operations and discharges to file a group application. EPA used information from those groups to develop a *multi-sector* permit. The multi-sector permit is really a type of general permit specifically written/tailored to the industry information collected from the group applications. This permitting strategy has become more complicated than EPA had anticipated. Many states with primacy have chosen not to recognize the multi-sector permit, and require facilities to seek a state general or individual permit. The remaining states with primacy may use the EPA multi-sector permit in some form when issuing a facility its storm water permit. In EPA lead states, facilities will still have the option of choosing the multi-sector permit, or filing for coverage under the EPA baseline general permit. The multi-sector permit is discussed in detail in the following chapter. A copy of EPA's permit application Forms 1 and 2F, and its NOI is provided in Appendix F.

Even if an installation elects to accept regulation under a general permit or petitions for inclusion in a group permit, the regulatory agency may deny the

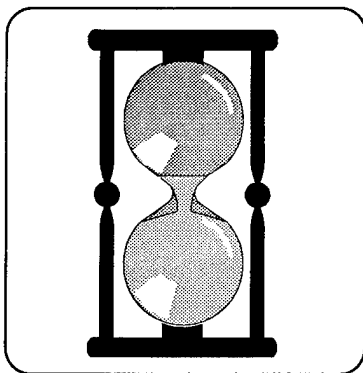
application. If the facility poses a significant risk of polluting U.S. waters because of unique factors, an individual permit may be required. Such a decision by the regulatory agency could occur at any point in the permitting process. A time period is usually granted for an applicant to pursue the individual permit.

No matter what application route is chosen, facilities with an existing NPDES permit may face yet another scenario. In some cases, regulators may include the storm water discharge requirements in the facility's existing NPDES permit rather than issue the facility a separate storm water permit. In this situation the regulators will either modify your existing NPDES permit (issue a permit modification) immediately, or may elect to wait until your existing NPDES permit expires and then add storm water requirements to the renewal permit (or variations on this theme).

In summary, two factors cause difficulty in determining which permit a facility may receive: the authority of the regulators (to deny an application/permit path), and the identity of the entity that holds primacy (state or federal government). Much is based on the discretion of the regulators.

CHAPTER 3

EPA Status



THE GENERAL PERMIT

The EPA general permit for storm water discharges associated with industrial activity was published in the 9 September 1992 Federal Register (Vol. 57, No. 175) and the 25 September 1992 Federal Register (Vol. 57, No. 187). The EPA general permit will expire on 1 October 1997. To remain covered under the general permit after that date, permittees must submit a new NOI between 1 August 1997 and 29 September 1997.

1 OCTOBER 1993 DEADLINE

Under a legal settlement with the Natural Resources Defense Council, EPA was to have issued permits to all industrial storm water dischargers by 1 October 1993. However, the EPA did not publish a final "multi-sector" permit before that deadline. Legally, facilities which are part of the group application operating after 1 October 1993 without a permit are not in compliance with the regulations.

THE MULTI-SECTOR PERMIT

A New Approach

The EPA received well over 700 group applications, with 44,000 industrial facilities participating in the group application process. On the basis of information from those groups (sampling data, activity descriptions, materials exposed to storm water, best management practices), EPA developed an industry-specific multi-sector general permit. To develop this permit, the EPA reduced all group applicants into 29 industrial sectors based on similarity of activities. It then incorporated the permit requirements for all 29 sectors to a single storm water permit. Refer to the EPA released press package (Appendix G) for a list of the 29 industrial sectors; in that press package, an asterisk identifies those sectors that may be relevant to an Army installation.



Public notice of the 800-page permit and 900-page fact sheet was published in the 19 November 1993 Federal Register (Vol. 58, No. 222). A 90-day comment period was granted, after which the permit would be finalized and issued. The EPA expects to finalize its multi-sector permit in the fall of 1994.

What You Need To Know

WHO WILL USE THE PERMIT?

The EPA expects the 12 non-NPDES states, 6 territories, 5 states without Federal facilities permitting authority, and certain Federal Indian Reservations where EPA is the permitting authority to use the permit. Also, this permit may or may not be used by the other NPDES states. Appendix G presents a list of those states that may use the multi-sector permit.

HOW DO I SEEK COVERAGE?

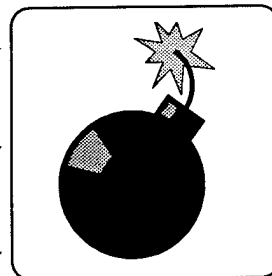
After the final multi-sector permit is issued, both group applicants and non-group applicants who wish to gain coverage under this permit must submit an NOI. Thus, even if your facility did not participate in the group application process, you may still seek coverage under this permit (EPA lead states).

IF MY FACILITY IS PART OF A GROUP APPLICATION, WHY MUST I FILE AGAIN?

The EPA is requesting the submission of an NOI to satisfy legal requirements. Because the conditions of the multi-sector permit are different from the EPA general permit conditions, a new NOI indicates that you will abide by the new permit. Multi-sector permit applicants must sign the application statement swearing that they have read and understood all permit conditions. That is an EPA legal issue.

WHAT DEADLINES SHOULD I BE AWARE OF?

- ◆ 90 days to submit an NOI after a permit is issued (48 hours after submission of a complete NOI, a facility has permit coverage)
- ◆ 90 days to transfer into the multi-sector permit from the general permit
- ◆ 270 days to develop and implement a pollution prevention plan after permit issuance
- ◆ No longer than 3 years after permit issuance to implement controls that require construction



HIGHLIGHTS OF THE PROPOSED MULTI-SECTOR PERMIT

For a more detailed summary of the proposed multi-sector permit, refer to the EPA press package in Appendix G. An actual copy of the multi-sector permit can be obtained from AEC.

Multimedia Compliance

The proposed multi-sector permit addresses multimedia compliance. EPA has included on the NOI a statement that requires operators to certify that they are in compliance with the applicable requirements of the Endangered Species Act (ESA), National Historic Preservation Act (NHPA), and National Environmental Policy Act (NEPA).



Discharges that have an impact on a listed endangered/threatened species but do not have an ESA Section 10(a) incidental take permit are not eligible for coverage.

Discharges that disturb a site listed in, or eligible for listing in, the National Historic Register are not eligible for coverage.

Discharges that are subject to New Source Performance Standards (NSPS), and are therefore subject to NEPA, that do not have a Finding of No Significant Impact (FONSI) or a completed Environmental Impact Statement (EIS) are not eligible for coverage.

Collocation Issues

Storm water discharges from collocated industrial activities are authorized by the proposed multi-sector permit, provided that the industrial facility complies with the additive pollution prevention plan and monitoring requirements applicable to the collocated industrial activities.

Industry-Specific Best Management Practices

The pollution prevention plan is still the basic storm water control mechanism in the permit. The main difference between the EPA baseline general permit and the proposed multi-sector permit is that the multi-sector permit addresses industry-specific BMPs. Those BMPs can either be baseline BMPs or advanced/structural BMPs. The permit language is written such that certain BMPs are required and *must* be implemented, while others need only be *considered*.

Where construction is necessary to implement measures required by the plan, the plan must contain a schedule that completes construction no later than 3 years after permit finalization.

Benchmark Monitoring

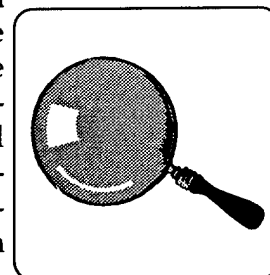
Of the 29 industrial sectors, 17 "high-priority" sectors will be required to conduct quarterly storm water grab sampling in Year 2 and possibly Year 4 of the five-year permit (there are no composite sampling requirements). Based on a statistical analysis of group application data, EPA identified pollutants of concern for each industrial sector and established benchmark values for each of them. The primary sources of the benchmark values are National Urban Runoff Program (NURP) median values for conventional pollutants and Gold Book Values for other pollutants. EPA proposes to require monitoring for priority industrial activities only. The EPA has selected five pollutants with median concentrations above benchmark levels as one criterion for selection as a priority sector.



The objective of EPA's benchmark monitoring is to show, based on Year 2 sampling data, whether pollution prevention measures implemented in the first year are adequate. Refer to Appendix G for a list of those sectors that require monitoring. Facilities whose storm water runoff contains pollutant levels that exceed benchmark levels set forth in the multi-sector permit must improve their BMPs and resample during the fourth year of the permit. Facilities for which storm water sample runoff falls below benchmark levels are exempt from monitoring during the fourth year. All monitoring results must be submitted to the Regional EPA office.

Visual Inspections

All facilities covered under the proposed multi-sector permit will have to conduct visual inspections of storm water discharges on a monthly or quarterly basis depending on the industrial sector. Visual inspection consists of examining a grab sample from each discharge point within the first 30 minutes of the start of runoff. The examiner must visually inspect the quality of the storm water by observing color, odor, clarity, floating solids, settled solids, suspended solids, oil sheen, and other obvious indicators of storm water pollution. EPA expects the visual examination to be performed by members of the pollution prevention team.



SARA Title III, Section 313 Facilities

Unlike EPA's baseline general permit, the proposed multi-sector permit does not contain special monitoring requirements for facilities subject to the Toxic Release Inventory (TRI) reporting requirements under Section 313 of the EPCRA (Emergency Planning and Community Right to Know Act). After reviewing the group application data, EPA determined that monitoring requirements were more appropriately based upon the industrial activity or significant material exposed. However, as in the baseline general permit, EPA has retained the special pollution prevention plan requirements for Section 313 facilities. Chapter 5 presents a discussion of SARA Title III, Section 313 requirements in EPA's baseline general permit.

CHAPTER 4

Army Status



PERMIT APPLICATION

An application process has already been chosen for your facility. The MACOMs, with AEC assistance, are currently handling the Army's storm water program. If you are an Army Materiel Command (AMC) facility, AMC HQ has already delegated the storm water program down to the installation level [through the major subordinate commands (MSCs)]. That means AMC installations have chosen their own permitting approaches. The Army National Guard is also handling its own installations.

The permit process for other MACOMs, including Reserve facilities, has been handled by AEC.

The Army is involved in two group applications, one for the Active Army (EPA Group 382) and the other for Reserve facilities (EPA Group 383). Most Forces Command (FORSCOM), Training and Doctrine Command (TRADOC), U.S. Military Academy (USMA), Health Services Command (HSC), Information Systems Center (ISC), and Military District of Washington (MDW) installations are participating in one of the Army group applications. In general, AMC installations have avoided the group application track because their operations are unique; they either obtained general or individual permits.

Currently, 31 installations are included in the Active Army group application, and 89 in the Reserve group application (Appendix H). These numbers will decrease with time for various reasons:

- ◆ Some states do not recognize EPA's group process (for that reason alone, many Army participants have had to obtain general or individual permits from the states in which they are located).
- ◆ Certain states conditionally accept the EPA group.
- ◆ The Army has voluntarily removed installations from the EPA group because in many states, general permits are easier to comply with.
- ◆ A few NPDES states have not issued final general permits or have no general permitting authority. When that situation changes, Army installations may wish to apply for the state's general permit.

- ◆ Some installations may not require permits, given site-specific conditions or decision by the permitting authority.

All other installations not participating in a group either intend to comply with a general permit or are seeking an individual permit as required by state-specific conditions. AMC installations¹ have had to seek individual permits because AMC tends to conduct major industrial activities at those installations, and thus, they would not be qualified for group permitting. *Be aware of the kind of permit your facility is seeking.*

The Army application selection process is subject to errors and omissions, especially in the case of Reserve installations. Check to see what kind of permit, if any, your installation has applied for and whether that permit is appropriate for your installation. If it turns out that your installation has *not* applied for a permit, either directly or through your MACOM, then you need to check to ensure that no permit is required. Should you need assistance, refer to the contact names provided at the end of this chapter.

Now that you are involved in a permit application process, what do you do next? The next two subsections discuss where we go from here.

Individual Route

If your facility is seeking an individual permit, actively participate in preparing it. You have two ways to do so:

- ◆ Make your staff available to the permit writers at your regulatory authority. You know the facility better than the regulators and you may have some information or suggestions that will be helpful to them.
- ◆ The public notice period is an excellent opportunity to express your views on the draft permit before it becomes finalized. Regulators are required to respond in writing to your expressed concerns. You can use that requirement as a tool to negotiate a more favorable permit. Once the draft is written, your influence over the process is greatly diminished.



After the permit is issued, read it carefully. The “effective date of the permit” and the “expiration date of the permit” can be found on the front page of your permit. You must comply with the permit beginning on the date that it is

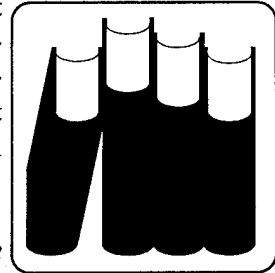
¹Fort Monmouth, New Jersey, was the only AMC installation that participated in the group application process. New Jersey conditionally accepted EPA’s group process, and established a deadline of October 1, 1993, after which it would no longer recognize the group process. Because of this deadline, Fort Monmouth was forced out of the group process.

issued to the facility (usually the effective date of the permit). Chapter 5 presents an overview of basic permit conditions.

General Route

If your facility is seeking applicable Federal or state general permits, you will face one of two situations:

- ◆ *General permits are final and in effect* – In this situation, no permit negotiation is involved because the general permits have already gone through public notice procedures. The EPA general permit and most NPDES state general permits fall in this category. After an NOI has been filed, your installation must comply with all permit terms immediately (e.g., you must meet specified timelines for SWP3 development and implementation).
- ◆ *General permits are in draft stage and have yet to be finalized* – If you are faced with this situation, try to participate during the public comment period (Wisconsin should be the only state in this stage). Once the permit is finalized, immediately file an NOI (unless the previous NOI suffices) and comply with the permit provisions. Check the effective permit date listed on the front page.



Group Route

As of 1 May 1994, group applicants are awaiting EPA's response to comments received during the proposed multi-sector permit public notice period, which ended 17 February 1994. On the basis of comments submitted to EPA by industry groups, environmental groups, the Department of Defense (DoD) and other interested parties, EPA will revise its draft permit and finalize it sometime this year.



DoD RESPONSE TO THE MULTI-SECTOR PERMIT

During the public notice period (17 November 1993 through 17 February 1994), representatives from the Army, Navy, and Air Force met with representatives from the Office of the Secretary of Defense to critique the multi-sector permit. In the initial meeting they decided that only one set of comments, representing all DoD facilities, would be submitted to EPA. A copy of DoD comments on EPA's multi-sector permit is provided as Appendix I. A summary of the main points is highlighted here.

- ◆ *Questions concerning sector applicability:* Because SIC codes are used for industrial sector coverage, installations have difficulty determining applicability. The permit addressed collocation of industrial activities but did not address situations in which more than one sector affects a particular activity (e.g., Defense Reutilization and Marketing Office yards may be regulated under three different sectors: hazardous waste treatment, storage or disposal; auto salvage yards; and scrap and recycling facilities).
- ◆ *Use of threshold limits:* DoD requested EPA to consider providing quantity-based threshold limits for applicability of secondary sectors (activities that are not primary functions of the facility). Installations with extremely small operations (in terms of quantity and duration) are potential candidates for coverage under many sectors.
- ◆ *Multimedia approach:* DoD sees the multimedia approach as placing additional burdens on an installation's limited resources and personnel.
- ◆ *Sources used to determine benchmark levels:* DoD believes that the benchmark values are not valid because site specific characteristics such as background contamination levels, receiving water characteristics, and natural variability make any attempt to establish national benchmark values inappropriate. Benchmarks are too stringent. DoD requested that EPA either discount background levels of pollutants from benchmark values, or set the values to drinking water standards or to background levels for a specific watershed.
- ◆ *Undue burden of records retention requirements:* EPA should reduce burdensome records retention requirements.
- ◆ *Inappropriateness of visual examinations:* DoD questions the usefulness of conducting such an examination. Many installations are extremely large and may have 100 or more regulated storm water outfalls. It is impractical to assume that the pollution prevention team can visually sample from all such outfalls within the first 30 minutes of storm water runoff. DoD recommended the use of visual inspections rather than visual sampling as a method for determining the effectiveness of current pollution prevention measures.
- ◆ *Clarification of transportation facilities and vehicle maintenance activities:* DoD does not believe that EPA intends to regulate all gas stations and motor pools that have maintenance or cleaning operations, however small. DoD asked EPA to consider limiting the definition of vehicle maintenance operations to motor or transmission overhauls and to establish a minimum threshold quantity of 7 vehicles per week for sector applicability purposes.



- ◆ *Changes to sector applicability for air transport facilities:* DoD agrees with the threshold limit approach, which bases sector applicability on quantity of de-icing materials used per year, as opposed to number of flight operations conducted per year.



The Department of the Army (DA) is concerned about the overall attractiveness of the multi-sector permit. Since EPA may modify the proposed permit in response to the comments received, the finalized permit may look somewhat different than the draft version. Installations that are part of a group application must decide about permit coverage in the near future; either they go with the multi-sector permit or switch to the state/Federal general permit. As EPA finalizes its multi-sector permit, AEC will provide installations with additional information on the advantages and disadvantages of each permit type. AEC's objective is to help installations make an informed decision on the type of permit coverage they should seek.

WHAT NEXT?

What happens after EPA finalizes the multi-sector permit? That depends upon the state in which you are located. The following subsections break down the discussion of the group approach by the different permitting authorities: EPA Lead applies only to those states in which the regional EPA has Federal facilities-permitting authority; State Lead applies only to those NPDES states with Federal facility-permitting authority (refer to Appendix C for state status).

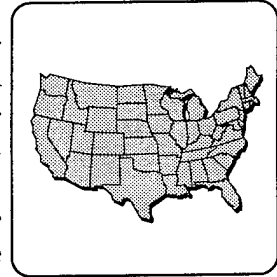


EPA Lead

Once EPA issues the multi-sector permit, the regional EPA offices will also issue it to all interested parties within their region. Note that the multi-sector permit is one type of general permit and EPA's baseline general permit is another. As discussed in the previous chapter, once the multi-sector permit is finalized, an NOI must be submitted for permit coverage within the time frame specified. Regional EPA offices have the authority to tailor the multi-sector permit to reflect site-specific conditions within that region, and within a particular state. For example, region-specific conditions in the proposed permit state that Region VI does not anticipate allowing multi-sector permit coverage for hazardous waste treatment storage or disposal facilities. Those facilities would need to seek alternative coverage.

State Lead

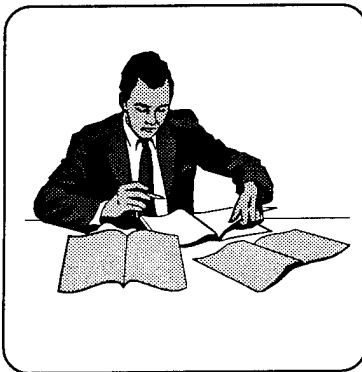
The NPDES states are not required to issue the multi-sector permit to your installation even if you have chosen that route. An NPDES state may choose to issue an individual or state general permit to your facility. If it does, the state may request more specific information from you. To provide that information, you may have to sample storm water runoff or supply detailed coordinates of the discharge points.



If your permitting authority changes from regional EPA to state, you will probably have to switch from the Federal general permit to a state general permit.

Under Section 401 of the CWA, states have a right to include water quality criteria in the multi-sector permit, regardless of who the permitting authority is. Water bodies in the United States are classified by designated uses (e.g., potable waters, recreational waters) and must meet certain pollutant limitations. Federal permits need a certification by the state that the storm water discharges will be in compliance with Sections 301-307 of the Federal Water Pollution Control Act. This may imply more stringent requirements for you to meet.

You should maintain an open line of communication with your regulatory authority. *Be prepared to provide any information needed by the state or regional EPA.* To find out what type of information is needed, call the point of contact for your state (Appendix C). Inquire specifically as to what will be required of you, and plan ahead for what you will do if the multi-sector permit option is rejected by your state.



POLLUTION PREVENTION PLAN DEVELOPMENT

The AEC contracted with the U.S. Army Corps of Engineers (USACE) to assist in the development of storm water pollution prevention plans (SWP3s) for select installations. Through this MACOM/installation funded contract, Army facilities could obtain a pollution prevention plan. This contract allowed Corps Districts to hire A/E firms in order to develop the plans. In some instances, the Corp Districts developed the plan themselves. [The U.S. Geological Survey (USGS) also developed some plans.] The

first set of plans was developed for 20 installations; draft versions were due on 27 September 93, and finalized by 14 January 94. Draft versions for the second set of plans involving 177 installations (excluding those in New York and New Jersey) were due 18 January 94, with finalization of plans expected by 10 May 94. A total

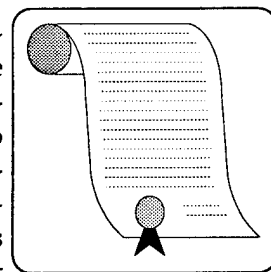
of 143 Reserve and 54 Active Army installation SWP3s were covered in this contract.

In the near future, AEC will award another contract to USACE to prepare the first annual SWP3 update. Facilities will be notified when that contract is available.

ENVIRONMENTAL STAFF TRAINING

Training During FY93

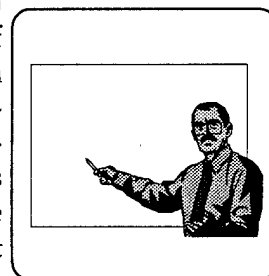
During FY93, AEC provided a series of five 3-day intensive storm water training seminars. The target audience for the training program was installation storm water coordinators, Corps contractors and the A/E firms hired to write the SWP3s. The seminar was hosted by Environmental Science & Engineering, Inc. (ES&E). Speakers included representatives from ES&E, USGS, and Logistics Management Institute (LMI). The introductory training was basically an overview of the topics covered in this manual, with detailed Army-specific discussions on SWP3s and BMPs; it also included a field trip to a nearby Army installation. Chapter 6 discusses training in greater detail.



Training During FY94

Five additional rounds of storm water training will be provided in FY94. Two of the five training sessions will be geared towards representatives from Army Reserve installations, while the other three will be for Active Army personnel. The AEC's goal is to have at least one representative from each installation at an introductory training course. If you have not attended one of the seminars and will not be able to attend one in FY94, contact your AEC representative and ask for a videotape of the course.

The AEC also plans to provide exportable training packages for its facilities. The package will consist of videotapes, lesson plans, tests, stickers, and posters. The U.S. Army Reserves Training Support Package (TSP) is designed to improve knowledge and understanding of the Army storm water program and SWP3 implementation at Reserve facilities. The TSP focuses on five target audiences: facility managers, aircraft support facility personnel, marine support facility personnel, facility employees (including tenants), and spill response team members. The Reserves training package should be available by August 1994 and the Active Army package by December 1994.



PROGRAM DELEGATION TO INSTALLATIONS

Overview

Up until this fiscal year, the Army storm water program has been, for the most part, centrally managed. As discussed in the beginning of this chapter, AEC played a major role in most installations' permit application process, contracting for SWP3 development, training of environmental staff, and regulatory reviews. AEC's new role is to prepare Army installation environmental staff to assume responsibility for their installations' storm water compliance program. Through the use of certain communication tools, AEC plans to provide installations with program assistance, such as the up-to-date information on regulatory issues and Army policies, information papers on compliance issues, and other miscellaneous guidance.

Communication Tools

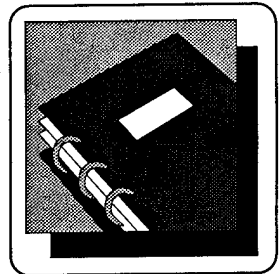
In-Progress Reviews (IPRs) – The AEC conducts quarterly IPRs, the latest of which was conducted on 13-14 April 1994. The purpose of those IPRs is two-fold: they act as mechanisms for information flow among all involved parties, and they identify problems at the execution (installation) level.

Each MACOM is invited to send a representative to these IPRs. Other attendees include representatives from the Army's policy, technical, and legal support areas such as USACE Districts, AEHA, Construction Engineering Research Laboratory (CERL), Center for Public Works (CPW),

Office of the Judge Advocate General (JAG), and Office of the Director of Environmental Programs (ODEP). Many times, the Army also invites a speaker from a regulatory agency to address concerns unique to the Army. To date, the U.S. EPA HQ office has participated in two of the Army's IPRs. Minutes from the last IPR are provided as Appendix J. Following the IPRs, the Army Storm Water Steering Committee meets to discuss the direction of the program, problems that have arisen, and potential solutions.



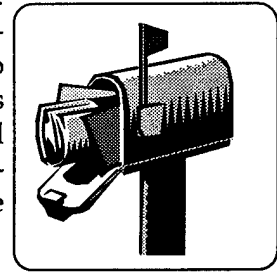
Handbooks and Guidance Manuals – Besides this handbook, storm water model pollution prevention plans are available for installation use (refer to Appendix K). AEC will also issue guidance on implementing Army-specific BMPs, storm water associated with construction activities, regulatory compliance issues (choosing between the multi-sector and the general permit), writing DB 1383s, and other miscellaneous documents as the need arises. Should your installation personnel identify any needs for which more guidance is required, please contact your MACOM storm water



coordinator or your AEC representative (listed in the next section of this chapter).

Information Papers – Information papers usually deal with technical issues. To date, AEHA has written a few such papers on permit application requirements, sampling protocol, and general permit requirements. Appendix K lists all internal Army references currently available. Installations should have copies of these papers. If you need a copy, please contact AEHA or your AEC representative.

Newsletters and Bulletins – By the end of this fiscal year, installations will receive Army storm water newsletters. Those monthly newsletters will inform installation personnel about the latest storm water issues. They will identify all ongoing storm water related activities at the Army HQ level. The newsletters will be used to supplement and update the information provided in this handbook. In addition to newsletters, information will also be distributed through on-line systems, such as Defense Environmental Network Information Exchange (DENIX).



WHERE TO GO FOR PROGRAM ASSISTANCE



Assistance is available in the following categories within the specified agencies:

- *Funding/1383s* – assisting in 1383 project classifications and budget requests.
 - Major Army Commands (MACOMs)
 - Army Environmental Center (AEC)
- *Legal interpretation* – providing regulatory interpretation.
 - Office of the Judge Advocate General (JAG)
- *Monitoring* – sampling and analysis of storm water runoff.
 - Army Environmental Hygiene Agency (AEHA)
 - U.S. Army Corps of Engineers (USACE)

- *Permit applications* – choosing an appropriate application for your installation, filling out application forms.
 - ☑ AEC
 - ☑ AEHA
- *Permit interpretation/review* – clarifying permit conditions, negotiating permit with regulators, reviewing and commenting on draft permits.
 - ☑ AEHA
 - ☑ AEC
- *Program management* – providing general information concerning Army policy and regulatory status.
 - ☑ AEC
 - ☑ MACOMs
 - ☑ Office of the Director of Environmental Programs (ODEP)
- *SWP3/BMPs* – developing and implementing SWP3s; recommending and evaluating BMPs.
 - ☑ USACE
 - ☑ Construction Engineering and Research Laboratory (CERL)
 - ☑ AEHA
- *Training* – providing information on available in-class storm water training, manuals, videos.
 - ☑ MACOMs

Contact the Army Environmental Center for other miscellaneous problems or inquiries! AEC has been the central manager for the Army storm water compliance program. Duties have included coordinating efforts on research, development and distribution of storm water information (including information on BMPs, and providing guidance on new federal regulations). AEC also acts as the main switchboard for questions and requests for assistance and will refer installations to the proper contact persons.

Contact names and phone numbers at each of the above referenced agencies are provided in Table 4-1. Figure 4-1 is an Army storm water program functional diagram, which shows the relationship between all Army agencies.

Table 4-1.
Army Points of Contact

ARMY AGENCY/POINTS OF CONTACT	Telephone Numbers
U.S. Army Environmental Center (USAEC) Paul Josephson, Project Officer <i>e-mail: pajoseph@thama1.apgea.army.mil</i>	(410) 671-1217/DSN 584-1217
U.S. Army Corps of Engineers (USACE) <i>Mobile Corps District:</i> Joe Long, Engineer Ronnie Gibson, Project Manager Charles Smith, Project Manager <i>Construction Engineering Research Laboratory (CERL):</i> Joe Matherly Rick Scholze <i>Army Center for Public Works (CPW):</i> Robert Fenlason	(205) 694-4085 (205) 690-2688 (205) 694-4216 (217) 373-3488 (217) 373-3488 (703) 806-5201/DSN 656-5201
U.S. Army Environmental Hygiene Agency (AEHA) Michael Robison, Project Leader Wendy Mervine	(410) 671-3919/ DSN 584-3919 (410) 671-3919
U.S. Army Forces Command (FORSCOM) Ron Nichols	(404) 669-7688
U.S. Army Materiel Command (AMC) LTC Tom Allen	(703) 274-9868
U.S. Army Office of the Judge Advocate General (JAG) COL Mark Graham	(703) 696-1230
U.S. Army Reserves Command (USARC) Debbie Richert	(404) 629-8266
U.S. Army Training and Doctrine Command (TRADOC) Mike Cochran	(804) 727-4241
U.S. National Guard Bureau (NGB) CPT Greg Costello	(703) 607-7982
Office of the Director of Environmental Programs (ODEP) Steve Hearne	(703) 696-8078/DSN 226-8078

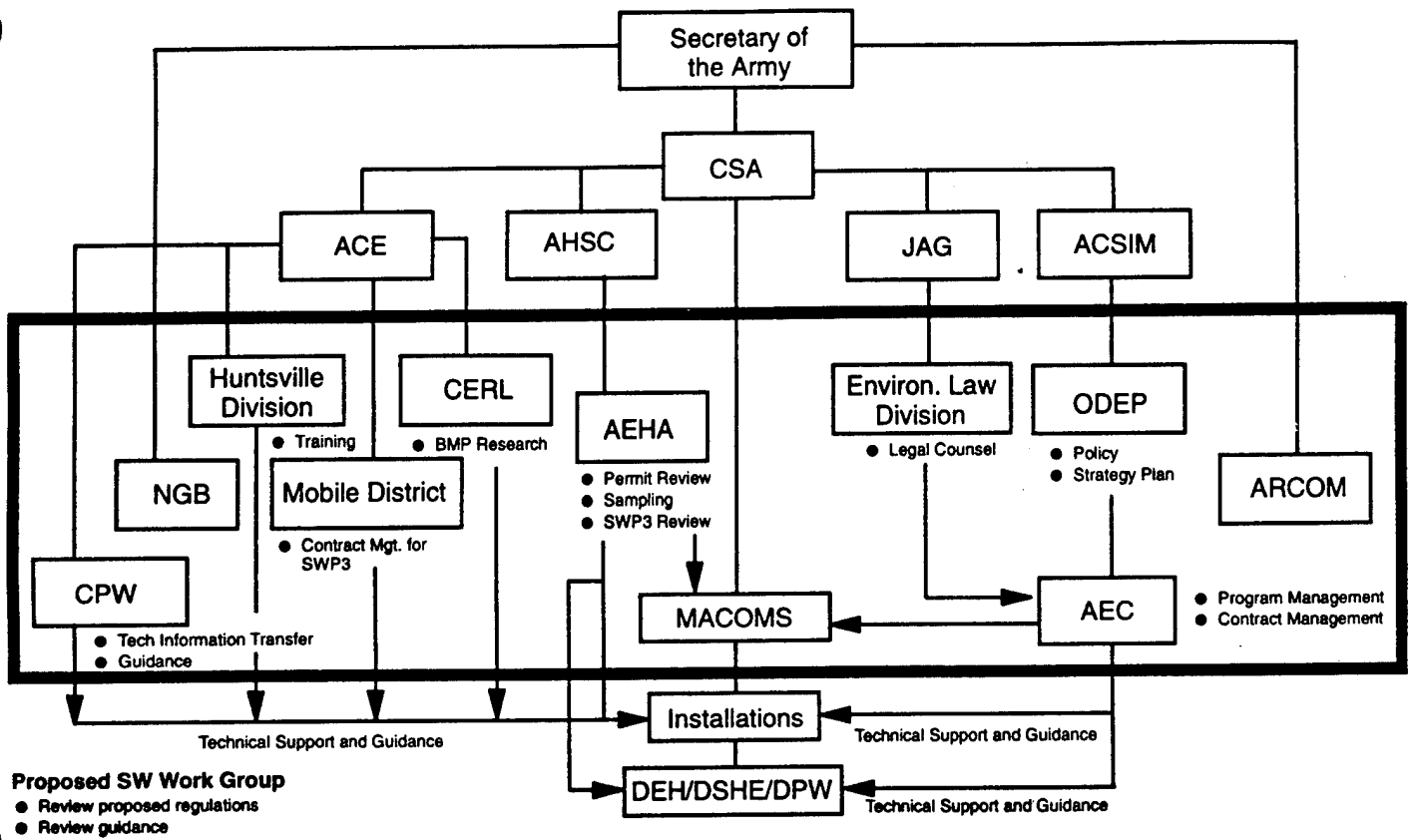


Figure 4-1.
Army Storm Water Program – Functional Diagram

CHAPTER 5

The Permit



BASIC REQUIREMENTS

Preventing pollutants from coming into contact with precipitation and ultimately being discharged into U.S. waters is the objective of storm water permitting. The basic contents of each permit are similar regardless of whether your installation receives an individual, general, or multi-sector permit. The permit will specify who is covered, the conditions under which the facility is covered, and what needs to be done to comply with the permit. Expect to see requirements for the development and implementation of storm water pollution prevention plans, best management practices, monitoring/sampling, reporting, and standard conditions. The following sections discuss these requirements in detail.

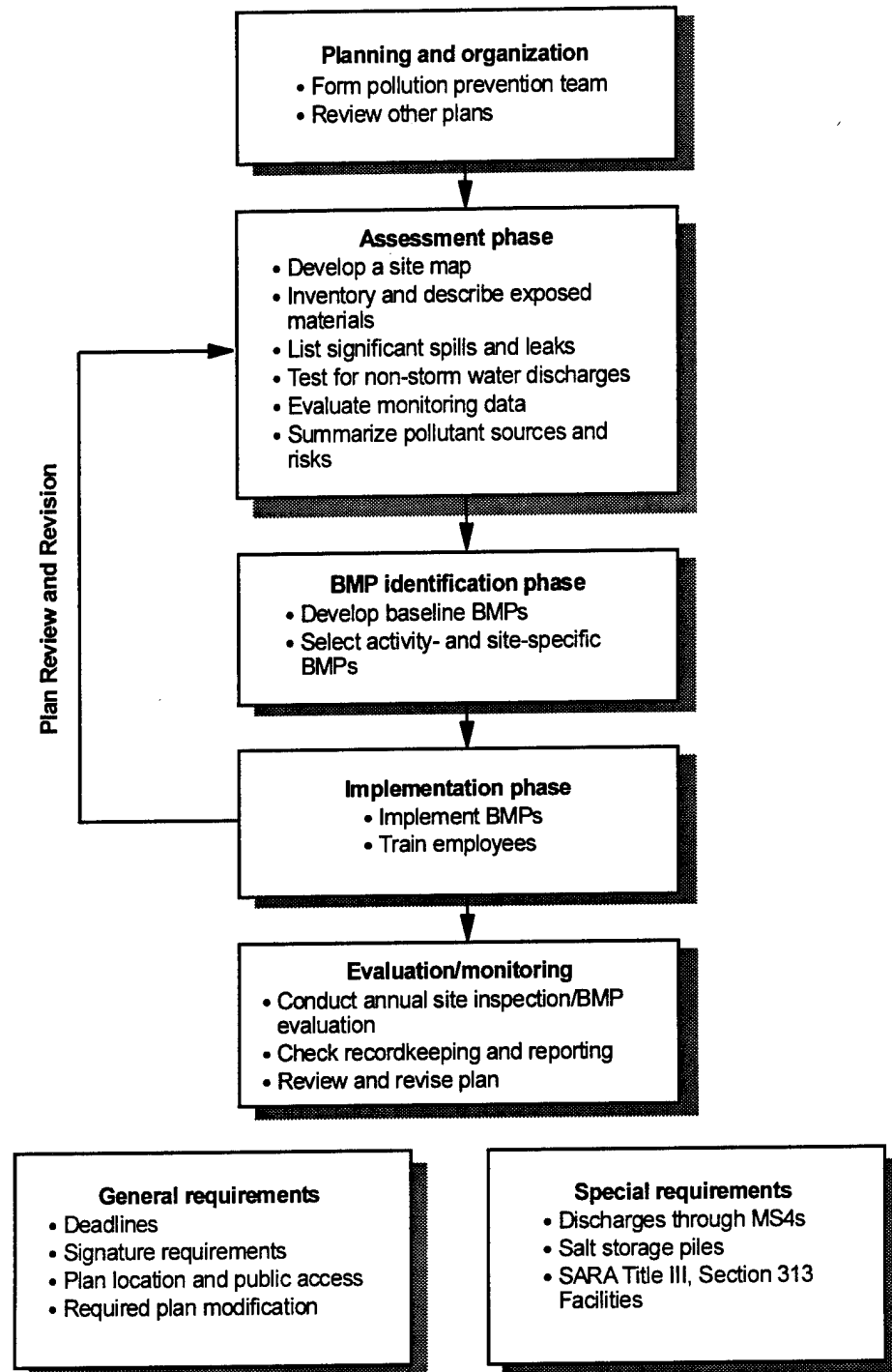
Storm Water Pollution Prevention Plans

This section summarizes the installations' duties to comply with and update the SWP3s. The SWP3s for most FORSCOM, TRADOC, HSC, and USMA installations have been prepared by USACE under contract to AEC.

The core of a storm water permit is an SWP3. The basic premise of that plan is to prevent storm water contamination from occurring in the first place. It identifies potential sources of storm water pollution at industrial activities and the BMPs that will reduce or eliminate those pollutants in storm water discharges. Identification of BMPs and recommendations for implementing them are a major part of an SWP3 (see Figure 5-1).



Figure 5-1 describes the key components of an SWP3. In addition to BMPs, annual reviews, periodic inspections, accurate recordkeeping, and employee training are also key elements of the plan. As shown in Figure 5-1, BMP identification and implementation directly result from the *assessment phase* of the SWP3, during which all installation problems (e.g., storm water contamination scenarios) need to be identified.



Source: EPA Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, September 1992.

Note: MS4 = Municipal separate storm sewer system; SARA = Superfund Amendment Reauthorization Act.

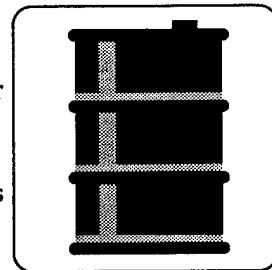
Figure 5-1.
EPA Storm Water Pollution Prevention Plan Flowchart

STORM WATER DISCHARGES

Most Army storm water pollution problems arise from areas in which spills and leaking materials are exposed to storm water or in which stored materials are exposed to precipitation (including snowmelt). Many of these problems result from poor housekeeping or poor operating procedures. When conducting daily activities around the installation, keep an eye open for obvious signs of storm water contamination.

Visual observation is an effective and easy method for detecting activities that have the potential to create storm water problems. The following are some common examples of potential problems:

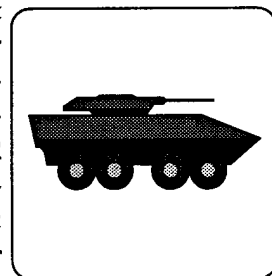
- ◆ Oil sheen or other contaminants on or in standing or running water
- ◆ Stains on the ground or unusual discoloration of earth or other surfaces, outfalls, or drainage areas
- ◆ Stressed vegetation (e.g., dying trees, patches of dead grass)
- ◆ Unclean areas (e.g., storage area in disarray, poor housekeeping)
- ◆ Poorly maintained, corroded, or damaged containers (e.g., drums, tanks).



Casual conversations with line operators can provide considerable information on potential problems (e.g., hearing of illicit discharges). Another suggestion is to investigate outdoor sites at which vehicles are washed. Check the drainage or flow pattern of that activity. It will probably be the same when a storm event occurs. Follow the path and check for any signs of storm water contamination such as those listed above.

NON-STORM WATER DISCHARGES

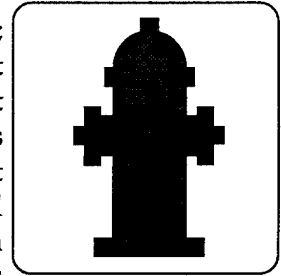
SWP3s also require a "certification of non-storm water discharges." That certification is a testimony that all storm water discharges (outfalls, etc.) have been tested for the presence of non-storm water discharges. It acts as a check for illicit connections to your storm water discharge systems. Visual inspections, plant schematic reviews, and dye testing are a few EPA-recommended methods of testing for non-storm water discharges. Chapter 2.2 of EPA's SWP3 guidance document, *Storm Water Management For Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*, 1992, provides further



information. Also refer to EPA's *Users Guide for Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems*, January 1993.

A common non-storm water discharge at Army installations is vehicle washings that drain into storm sewers. Soldiers often wash vehicles (with or without detergent) and allow the resulting runoff to drain into the storm sewer. (This type of discharge is a process water discharge and requires an NPDES permit.) Non-storm water discharges occurring at industrial areas are not allowable under the storm water regulations (unless otherwise authorized by your permit) and must be discouraged.

The only non-storm water discharges authorized by the EPA general permit for storm water discharges associated with industrial activity are discharges from fire-fighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown that does not use detergents or other compounds; pavement washwaters in which spills or leaks of toxic or hazardous materials have not occurred and in which detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains in which flows are not contaminated with process materials such as solvents.



Vehicle washings (without detergent or surfactants) are not usually authorized by a storm water permit because the washwaters are typically contaminated with soil residue, oil and grease, and other pollutants. This type of discharge is considered to be "process water," which is regulated as a point source discharge under an NPDES permit.

Many of the Army's vehicle washrack areas drain to a sewage treatment plant [either a Federally-Owned Treatment Works (FOTW) or Publicly-Owned Treatment Works (POTW)], or a retention/sedimentation pond. Washwaters that drain to an FOTW need to abide by the FOTW permit; washwaters that drain to a POTW need to be authorized by the municipality (under a pretreatment permit). Washwaters that drain into a retention/detention pond may or may not need a permit, depending on whether a discharge occurs to waters of the United States.

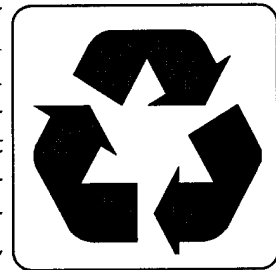
All vehicle washings should take place at dedicated sites, such as washrack areas. However, some common problems may exist in washrack areas. Overspray from drive-through washbays and clogged floor drains are typical Army concerns. Proper operation and maintenance of washrack facilities is key to preventing washwaters from being improperly discharged. Should vehicle washings occur near a storm drain, vehicle runoff must be kept from entering the storm sewers.

Best Management Practices

Table 5-1 details the components of a good BMP. A BMP is a measure and control that an installation must implement where storm water contamination exists. The eight activities listed in Table 5-1 are called “baseline” BMPs because they are inherent to a sound operation, and must be in place whenever potentially hazardous or polluting materials are used. Baseline BMPs are inexpensive, relatively simple, applicable to many industries, and are usually nonstructural. They entail working with an approach that may already be proven rather than implementing more costly structural controls. Installations will already have some BMPs in place for quality control, accident and fire prevention, worker health and safety, or compliance with other regulations. What is expected of you now is to improve on your installation’s existing BMPs. Chapter 2.3 of EPA’s SWP3 guidance document presents further information on BMPs.



In some situations, where baseline BMPs are not adequate to solve your storm water pollution problems, you will need to implement “advanced” BMPs. Advanced BMPs are tailored to your specific needs; are usually structural; and may involve changes in process, containment and diversion, recycling, materials substitution, and treatment (e.g., oil and water separators). Check that the advanced BMPs used will conform to, or be consistent with, other environmental plans at your installation. Again, refer to EPA’s SWP3 guidance document for a detailed discussion of advanced BMPs.



Most states require an installation to develop and then implement an SWP3 that is specific to the installation within a given time frame. Some states also require you to submit a copy of the SWP3 to the local authority. All this information is contained within the permit. *Read the permit carefully and identify SWP3 deadlines and submittal requirements.*

Three Army model SWP3s have been developed for installation guidance by AEHA, USGS, and LMI. The USGS model SWP3 was based on site visits and observations at numerous Active Army and Reserve installations. The LMI model is actually an SWP3 developed during a visit to an installation, referred to as Fort X. Findings and solutions (BMPs, etc.) for Fort X are considered to be representative of what you may have at your own installation. The AEHA model is an actual template that your installation can use to build a tailored, site-specific SWP3.

Your installation’s initial draft SWP3 (as developed under USACE, Mobile District contract) should follow the format provided by the USGS model plan. In March 1994, that plan was revised to incorporate elements of the AEHA and LMI model plans. That revised USGS model plan will serve as the basis for the next round of installation SWP3 updates. Much information and guidance (internal

Table 5-1.
Key Components of EPA Best Management Practices

BASELINE BEST MANAGEMENT PRACTICES
<p>The description of storm water management controls should have as a minimum the following components, including a schedule for implementing such controls:</p> <ul style="list-style-type: none"> ◆ <i>Good housekeeping:</i> requires maintenance of areas that may contribute pollutants to storm water discharges. ◆ <i>Preventive maintenance:</i> includes timely inspection and maintenance of storm water management devices; inspection and testing of facility equipment; and proper maintenance of facility equipment and systems. ◆ <i>Visual inspections:</i> identify qualified plant personnel to inspect plant equipment and areas; track results of inspection to ensure that appropriate actions are taken; maintain records of all inspections. ◆ <i>Spill Prevention and response:</i> identify areas in which spills can occur and their drainage points; specify material handling procedures, storage requirements and proper equipment use; provide appropriate spill cleanup equipment to personnel. ◆ <i>Sediment and erosion prevention:</i> identify areas that have a high potential for significant soil erosion, and identify measures used to limit erosion. ◆ <i>Management of runoff:</i> contain narrative of the appropriateness of traditional storm water management practices; implement measures determined to be reasonable and appropriate. ◆ <i>Employee training:</i> inform personnel at all levels of responsibility of the components and goals of the SWP3. Training should include spill prevention and response, good housekeeping, and materials management practices. ◆ <i>Recordkeeping and reporting:</i> include incidents such as spills or other discharges along with other information describing quality and quantity of storm water discharges as part of the records. Document all inspections and maintenance activities. Maintain records for one year after permit expires.

Source: EPA Storm Water Management for Industrial Activities: Developing Prevention Plans and Best Management Practices, September 1992.

Army and state/EPA manuals) exist on the SWP3 process. References are presented in Appendices K and L for in-depth review.

Remember that the SWP3 is a public document, and as such, it is available to the general public. Keep that in mind when handling sensitive information. Confidential information should not be made part of the SWP3.

Monitoring/Sampling Requirements

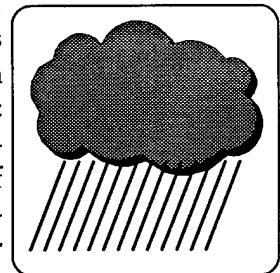
Each permit may require you to monitor storm water runoff from certain industrial activities. For activities whose storm water runoff must be monitored, the permit will specify what pollutants to monitor for, how often you must sample, when you must sample, and where you must report your findings.

In an individual permit, the monitoring requirements are facility-specific. General permits require monitoring at several kinds of industrial activities. If you have a general permit, you need only monitor for those activities present at your installation. Most common are annual and/or semi-annual monitoring requirements for land disposal units, coal pile runoff, battery reclaimers, coal-fired steam electric facilities, aircraft areas, auto junkyards, shipbuilding facilities, and specified sanitary sewage treatment facilities. *Identify which activities you have on site and which specific activity permit requirements are applicable to you.*



The permit may have numeric limits for the parameters to be monitored. If it does, follow sampling and violation reporting procedures specified in the permit. It may be that many of the pollutants you are monitoring will not have a numeric limit. Sampling for the presence of certain pollutants provides authorities with an opportunity to observe what is occurring at your installation. It acts as an indicator of the effectiveness of your pollution prevention measures.

Sampling involves collecting grab and composite samples of storm water from a "representative" storm event, and analyzing the samples for required pollutants, as outlined in your permit. Most States have adopted EPA's definition of a representative storm event: "... an event greater than 0.1 inch of rainfall occurring at least 72 hours after the previous storm event." A typical monitoring plan includes collection of grab samples during the first 30 minutes of discharge; collection of composite samples (flow-weighted or time-weighted) in each hour of the first 3 hours or the length of the discharge, whichever is less; determination of the volume of storm water runoff; and analysis of samples for specified pollutants.



The permit will indicate the sampling method required for each parameter, as well as the sampling frequency. Most permits typically require sampling for the basic conventional pollutants: oil and grease, acidity, total suspended solids (TSS), and biochemical oxygen demand (BOD) or chemical oxygen demand (COD). Sampling may be done in-house by qualified personnel on staff, or it may be done under contract. This decision of course is at the installation's discretion and depends upon in-house capabilities. The sampling protocols, as described in 40 CFR 136, must be observed. Detailed discussions of the analytical processes of sampling are presented in guidance manuals listed in Appendices K and L.

Monitoring and sampling differ. Monitoring is a "program," or set of activities conducted to measure the effects of your operations on the environment. A monitoring program can include site inspections, flow calculations, toxicity testing, and sampling. The program will tell you how to sample, when to sample, and how often to sample. Sampling is one method of determining the quantitative impact of regulated activities on storm water runoff. It consists of the physical act of going out and collecting the water, and then analyzing it for pollutants.

Authorities may use monitoring and sampling results to issue an installation a permit modification or an enforcement order. Based on these results, they may determine that your installation is discharging unacceptable quantities of a pollutant. An administrative enforcement order, if issued to your installation, requires you to take specified actions to reduce the pollutant loadings of that parameter. Further discussion on enforcement orders is presented in Chapter 6.

Reporting Requirements

Installations may be required to report semi-annual and/or annual sampling results on a discharge monitoring report (DMR) form or equivalent (depending on the industrial activity). Table 5-2 lists EPA's general storm water permit reporting requirements. Your own permit provides for facility-specific reporting requirements. The reporting requirements section of the permit also provides an address for mailing the DMR forms.

Keep a copy of all reports on file at the installation. DMR forms should be submitted to the regulatory authority by the individual responsible for environmental compliance. That individual (the Environmental Office Chief, Director of Engineering and Housing, or subject matter expert) may also sign the document, if the authority has been delegated down to the individual by the installation commander (an explanation is given in the next subsection). Data relative to concentrations of pollutants detected in a sample should be provided by a certified laboratory.

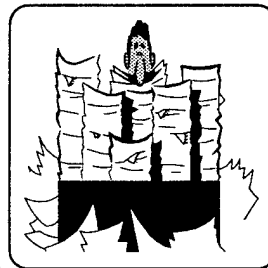


Table 5-2.
EPA General Permit Reporting Requirements

Monitoring Frequency	Submittal to Regulator	Activity
SEMI-ANNUALLY	Yes	Section 313 of EPCRA facilities, water priority chemicals
	Yes	Primary metals
	Yes	Land disposal units/incinerators/BIFs
	Yes	Wood treatment
	Yes	Coal pile runoffs
	Yes	Battery reclaimers
ANNUALLY	Yes	Airports (with over 50,000 flights/year)
	Yes	Coal-fired steam electric plants
	Yes	Animal handling/meat packing plants
	No	Chemical and allied products manufacturer, rubber manufacturers
	No	Auto junkyards
	No	Lime manufacturing plants
	No	Oil-fired steam electric power generating facilities
	No	Cement manufacturers
	No	Ready-mix concrete plants
No	Shipbuilding and repairing facilities	

Note: Data not submitted are retained on site; BIF = boilers and industrial furnaces.

Failure to submit a DMR on time is a violation of your permit and may result in an NOV from the regulatory authority. A detailed discussion of NOVs is found in Chapter 6. *Know when the DMRs are due and for what activities, and know where to submit the required reports.*

Standard Conditions

Regardless of permit type, certain standard conditions are typically found in most permits. Standard conditions include duty to comply, criminal and/or civil penalties for noncompliance, permit renewal information, signatory requirements, information on modification/reissuance/termination of permit, and bypass and upset conditions. Table 5-3 lists a few of the typical standard conditions. Further discussions on inspections and signatory requirements are provided in this section.

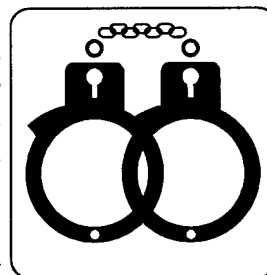


Table 5-3.
Typical Standard Permit Conditions

Condition	Summary
Duty to comply	Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action
Criminal penalties	Maximum penalties established for: <i>Negligent violations:</i> Fine: Between \$2,500 and \$25,000 per day Imprisonment: Up to 1 year <i>Knowing violations:</i> Fine: Between \$5,000 and \$50,000 per day Imprisonment: Up to 3 years <i>Knowing endangerment:</i> Fine: Up to \$250,000 Imprisonment: Up to 15 years <i>False statement:</i> Fine: Up to \$10,000 Imprisonment: Up to 2 years
Civil penalties	Maximum monetary penalty: \$25,000/day
Administrative penalties	Class I: Up to \$10,000/violation (\$25,000 maximum) Class II: Up to \$10,000/day (\$125,000 maximum)
Inspection and entry	Gives authority to EPA, State, or MS4 the right to enter permittee's premises, inspect the facility, and access records kept as part of the permit.
Bypass of treatment facility	Discusses notification procedure for anticipated (10 days before bypass date) and unanticipated (oral communication within 2 hours and written communication within 5 days) bypass.
Upset conditions	Discusses evidence/conditions needed to establish an affirmative defense of an upset.

INSPECTIONS

Installation personnel must allow a representative from the permitting agency, upon presentation of proper credentials and other documents required by law, to enter the facility and inspect all records related to that permit. The inspection may entail auditing of monitoring records as well as visual inspections of control equipment, BMPs, and other operations.

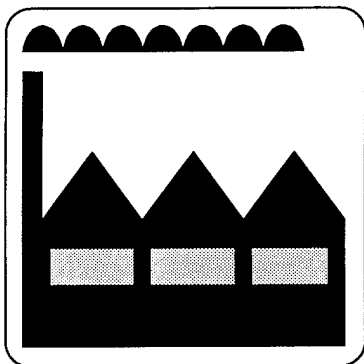
SIGNATORY REQUIREMENTS

All correspondence, reports, applications, certifications or information submitted to a regulating authority must be signed by the appropriate persons. Authorized signatures include those of the Secretary of the Army, the Commanding officers of the MACOMs and the MSCs, and the top ranking officer at an installation. Delegation of signatory authorization applies in many cases as long as such authorization is in writing and submitted to the regulatory agency that holds jurisdiction.



Authorized officials (e.g., the installation commander) may designate a representative to be responsible for handling and signing all correspondence, applications, or monitoring reports. That representative is typically knowledgeable in environmental issues, in running the day-to-day activities, and in overall facility operations. A person from the Directorate of Engineering and Housing (DEH) Environmental Office should be a good representative. A military commander at an installation must delegate that authority to the representative in writing and the written authorization must be submitted to the proper regulatory authority before any further action can take place. Appendix C gives a list of proper regulatory authorities. A sample delegation letter is provided in Appendix M.

Remember, the installation commander has the discretion to delegate responsibility. Some installation commanders may feel that running a storm water program is much more effective if authorization remains at the upper levels of the chain of command. That way, the commander can resolve or eliminate conflicts that may arise between civilian and military personnel and maintain effective communication and cooperation among all participants.



SARA TITLE III, SECTION 313 REQUIREMENTS

Your permit may reference SARA (Superfund Amendments and Reauthorization Act) Title III, Section 313 requirements. Until 1993, Federal facilities were not required to report under Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (EPCRA), also referred to as SARA Title III, with the exception of government owned company operated (GOCO) installations. The issuance of Executive Order 12856 (see

Appendix N), background on SARA Title III, and the implications of the Executive Order are discussed below.

Background

The SARA Title III allows state and local governments to enact emergency procedures in response to the releases of hazardous substances. Under that statute, facilities that manufacture, process, store, or use regulated chemical substances beyond threshold quantities, are required to notify state and local emergency planning committees of the presence of those substances, as well as provide reports on inventories and environmental releases of them. The threshold planning quantities (TPQs) and reportable quantities (RQs) referenced in SARA Title III are the criteria used to determine whether a facility is subject to notification requirements.¹

¹SARA Title III, Section 313 requirements are applicable only if the installation manufactures or processes more than 25,000 pounds of a regulated substance or if the substance is otherwise used in quantities exceeding 10,000 pounds annually.

SARA Title III also requires the submission of material safety data sheets (MSDSs). In addition, the act requires an annual inventory in a specified format for hazardous chemicals [as defined under the Occupational Safety and Health Act (OSHA)] located on site in regulated quantities. The inventory contains data on the average amount and maximum amount of a chemical/chemical category, and its site location during the previous calendar year. Copies of the inventory must be provided to the local emergency planning committee (LEPC), the fire department, and the state emergency response commission (SERC).



Section 313 of EPCRA requires the annual submission of the toxic release inventory (TRI). The TRI contains information on releases into the environment (i.e., air, water, land, off site treatment) for specified toxic chemicals manufactured, processed, or used in threshold quantities during the previous calendar year. The TRI is forwarded to EPA on "Form R." That report is, in essence, a materials balance for regulated chemicals. It is a demanding report that cannot be completed in a timely or acceptable manner without an effective system for the continuous tracking of regulated chemicals. Form R is required for each toxic chemical that meets threshold limits. For further information on SARA Title III, Section 313, consult your installation's hazardous materials coordinator.

Army History and the New Executive Order

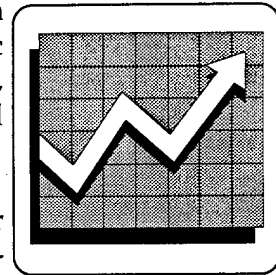
With the exception of GOCOs, DoD installations have historically been exempt from EPCRA requirements primarily because SIC codes are used in determining EPCRA applicability. On 3 August 1993, Executive Order 12856 was signed; it requires Federal agencies to comply with all provisions of EPCRA. The Executive Order, published in the 6 August 1993 Federal Register, requires "phased-in" compliance with EPCRA, culminating in the submission of a Form R by 1 July 1995. The Executive Order emphasizes source reduction, as well as a reduction in off-site transfers.

Implications from a Storm Water Perspective

Army installations subject to Section 313 requirements must include provisions for addressing the storage, processing, and handling of "water priority chemicals" in the SWP3s. These water priority chemicals are a subset of the chemicals identified in SARA Title III, Section 313 toxic chemicals list (40 CFR 372.65). Appendix O represents a listing of water priority chemicals.

Thus, if your installation is subject to TRI requirements, [i.e., is a facility at which water priority chemicals are located on site in excess of threshold quantities (known as "water priority areas")], you must address measures for preventing the water priority chemicals from coming into contact with precipitation in your SWP3. Additionally, water priority areas are subject to specific requirements for

containment devices, etc., that are more demanding than the requirements in other areas. All water priority/toxic chemicals, even those below TRI reporting thresholds, must be included with the required inventory of exposed materials in the SWP3.



For water priority chemicals, just as for all other chemicals regulated under EPCRA, the Army must develop efficient and accurate means for tracking the location and quantity of regulated materials from their initial receipt, manufacture, or process, to their ultimate disposal. Procedures for tracking the use of regulated chemicals should be in effect during calendar year 1994.

Professional Engineer Certification

The SWP3s written for facilities subject to EPCRA must be reviewed and certified by registered professional engineers (P.E.s). These P.E.s are not required to write the SWP3, only to *review* it and certify that the SWP3 meets permit requirements and is consistent with good engineering practices. The EPA general permit requires recertification of the SWP3s every 3 years or when significant facility modifications occur (e.g., the addition of new storage or material handling areas).

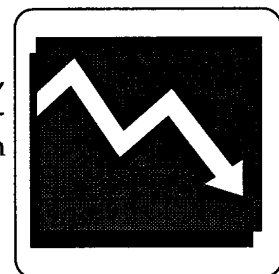
It makes sense that the initial SWP3 be developed by a certified P.E. so that certification renewals can utilize the knowledge of the original authors. This would result in less effort for subsequent plan revisions and would also avoid the reluctance of a P.E. to certify a plan written by a non-P.E. (or even by another P.E.) without a complete review.

Monitoring

Under EPA's general permit, storm water discharges from EPCRA, Section 313 facilities require semi-annual monitoring and an annual reporting of results. Most state general permits also address monitoring and reporting requirements for storm water from Section 313 facilities. In EPA's general permit, monitoring also includes whole effluent toxicity (WET) testing.

In conclusion, with regard to EPCRA regulated chemicals, the Army's goals are as follows:

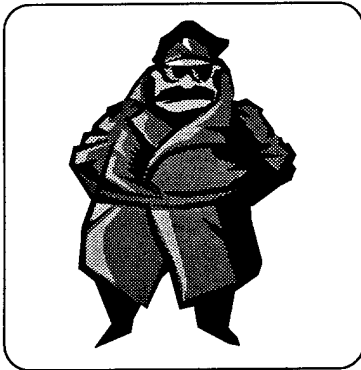
- ◆ From an environmental risk management perspective, the goal is to reduce the source, i.e., to eliminate or reduce the use of toxic chemicals such as those listed in EPCRA Section 313, and



- ◆ From a regulatory burden-avoidance perspective, the goal is to reduce the administrative burden associated with the continued use of those toxic chemicals beyond specified thresholds.

CHAPTER 6

Complying With The Permit



WHAT YOU NEED TO KNOW

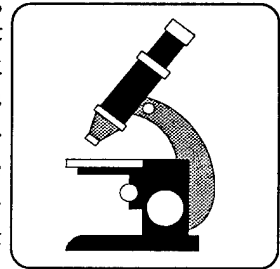
Once you receive a permit, read it carefully. Note that if your installation is operating under a general permit, you may not have “received” the actual permit. It may be that the permit was or will be published in the Federal/state register. In that situation, you may only receive a letter from the regulator saying that you are covered, and you must abide by the terms of that permit immediately. If you receive nothing, your filing of an NOI form is the initiation of your obligation to comply with the provisions of

the general permit. Whatever the circumstances, make a list of all milestones and submittal requirements. You should also be able to answer the following questions:

- ◆ *Who is my regulating authority?*
Local state officials or the regional EPA?
- ◆ *What kind of permit do I have?*
EPA general, state general¹, multi-sector, or individual? Or are the storm water requirements being incorporated into an existing NPDES permit?
- ◆ *When does my permit expire?*
Five years after permit issuance? Date?
- ◆ *What are my SWP3 submittal requirements and deadlines?*
Submit copy of my SWP3 to authorities or keep it on site? Deadlines?
- ◆ *What monitoring and sampling requirements are applicable to my installation?*
What regulated industrial activities take place on my installation? What must I sample for, and when? Who, specifically, will take the samples? Will they do it on their own, or will somebody be responsible for notifying them periodically?
- ◆ *When must I monitor for each activity on the installation?*
Annually, semi-annually, quarterly, or weekly?

¹Some states have more than one general permit

- ◆ *To whom do I report this information?*
What address is given in my permit?
- ◆ *If applicable, when are the Discharge Monitoring Reports or equivalents due?*
Semi-annually or annually? Dates?
- ◆ *Who is responsible for submitting DMR forms or other required paperwork?*
The facility manager?
- ◆ *Did the Installation Commander delegate signatory authority to the Environmental Office? DEH? Office of Public Works?*
Is the delegation letter on file?
- ◆ *Who are my points of contact at the regulatory authority?*
What contact person is identified in the permit? Check Appendix C.
- ◆ *Where must I monitor, and for what?*
You must monitor any discharge of storm water (into a discrete conveyance leading to a water body of the United States) from the installation associated with a regulated industrial activity that requires monitoring. One key to identifying the activities that need monitoring is the existence of a discrete conveyance that discharges storm water from a point source into a water body. Be aware that some states interpret *point source quite liberally* and include “sheet flow” as a regulated storm water discharge. Such activities and outfalls should already be identified in your permit application and the installation’s SWP3. Actual pollutants to be sampled will be listed in your permit.
- ◆ *What laboratory will perform the sample analysis? Are they certified?*
The Army has received NOV’s as a result of poor coordination between environmental offices and supporting laboratories. Ask whether you have a contract in place for this support or whether the work will be done by an on site laboratory. There is no Federal requirement to use a certified laboratory. However, certain states may require the use of a certified laboratory. Laboratory analysis must comply with analytical procedures set forth in 40 CFR Part 136.² Whether the analysis is done on-site or off-site, does the laboratory know what is required in terms of sampling protocols and reporting formats? To whom will the lab reports be delivered? Who will review them?



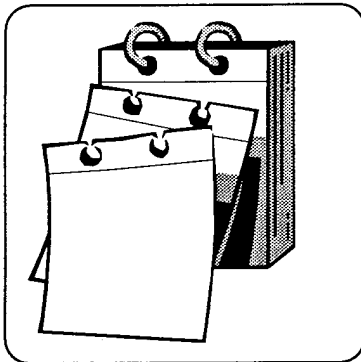
²U.S. EPA NPDES Storm Water Program Questions and Answers Document, Part II, September 1993.

◆ *Are motor pools regulated?*

The Army has taken the position that installations should address motor pools in their SWP3 if “significant materials” are stored, used or disposed of in the area. Generally speaking, motor pools that should be addressed are those conducting vehicle maintenance (preventive maintenance, cleaning, repairing, welding, replacement of parts, and fueling). The storm water must discharge to a water body (including wetlands) through a discrete conveyance. Note, however, that many permits do not require monitoring of storm water outfalls from motor pool areas.

◆ *What are significant materials?*

According to EPA, the term “significant materials” includes, but is not limited to raw materials; fuels; solvents, detergents, plastic pellets; finished materials; hazardous substances [designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)]; fertilizers; pesticides; and waste products (ashes, slag, sludge, etc.) that have the potential to be released with storm water discharges.



PERMIT COMPLIANCE OBJECTIVES

Complying with the permit is the main objective. Effective program management goals include the following:

- ◆ *Meet all specified deadlines and certification requirements*
- ◆ *Conduct required actions in a timely manner*
- ◆ *Avoid receiving NOVs or other enforcement actions*
- ◆ *Meet all applicable numeric limitations*

- ◆ *Use appropriate signatures on all correspondence*
- ◆ *Keep information and plans current*
- ◆ *Document everything, and provide accurate and thorough recordkeeping.*

These effective program management objectives are described in the following subsections.

Deadlines and Certification Requirements

Any permit will specify actions that must be undertaken within a given time frame (i.e., by the due dates). You are responsible for knowing what action is required, when, and by whom (and if applicable, to whom any reporting should

be directed). Table 6-1, derived from EPA's general permit requirements, shows examples of typical deadlines that may be specified in your permit. You can expect to see similar deliverables and deadlines in the multi-sector permit, as well as in many of the state general permits and individual permits. The following paragraphs explain the columns in Table 6-1.

Table 6-1.
Specified EPA General Permit Deadlines

Deliverable	Due date	Frequency	Submittal
SWP3	180 days from permit issuance	Once (plus updates)	No
SWP3 Implementation	365 days from permit issuance	Once	No
Non-storm water discharge certification ^a	180 days from permit issuance	Once	No ^b
Discharge monitoring reports	Jan 28th — EPCRA, Section 313	Once per year	Yes ^c
	April 28th — Primary metals/coal pile/battery reclaimers		
	Oct 28th — Land disposal		
Toxicity testing ^d	180 days from permit issuance	Twice per year	Yes
Permit renewal ^e	Aug 1 – Sept 29, 1997 (EPA general permit expires Oct 1, 1997)	Every 5 years	Yes

^aTo be included in the SWP3.

^bMust notify regulator of failure to certify.

^cFor those industrial activities listed only.

^dOnly applicable to those discharges required to conduct toxicity testing.

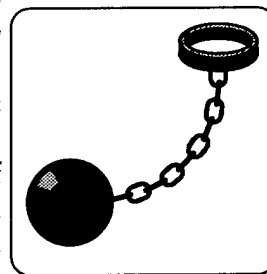
^eOnly if you choose continued coverage under the EPA general permit.

- ◆ *Deliverable* – Refers to common actions that are required as part of a storm water permit. For example, one major requirement is the development of an SWP3.
- ◆ *Due Date* – Refers to specific time deadlines for certain deliverables. Sometimes due dates are given by the number of days from a reference point such as the permit issuance date. For example, SWP3s are due 180 days from the date the permit is issued.
- ◆ *Frequency* – Refers to how often you must produce the deliverable. For example, SWP3s require annual updates, plus modifications any time a major change that occurs on site has an impact on storm water.
- ◆ *Submittal* – Refers to whether that document must be submitted to the regulatory agency. Since many states do not require SWP3 submittal, this

condition will vary depending on the state. Regardless of submittal requirements, facilities should retain a copy of all deliverables on site.

If you anticipate trouble in meeting a deadline, notify your regulatory agency immediately, explain why you cannot meet the deadline, and request a time extension. Do that in writing and have an authorized person sign it (refer to Signatory Requirements in Chapter 5). Keep a copy of any correspondence in your facility files. Correspondence should be sent in a manner that requires the regulatory agency to acknowledge receipt (e.g., certified mail).

Failure to meet a deadline or to file for an extension may result in an NOV or an administrative order (AO). NOVs and AOs received by the Army focus attention on alleged Army shortcomings and undermine the many successful compliance efforts at the installation level. In addition, they create action requirements that can be a severe drain on your installation's operation and maintenance (O&M) funding. Both the Army itself and individuals are subject to fines; individuals may also be subject to imprisonment. Therefore, your goal should be to minimize the number of NOVs and AOs the Army receives. Penalties are discussed further in the *Standard Conditions* section of your permit. A detailed review of NOVs is provided later in this chapter.



Timely Execution of Required Permit Actions

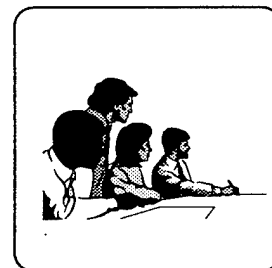
To reiterate, it is extremely important that you implement all required permit actions in a timely manner. *In addition to performing the required actions, you must document all of the actions taken.* Regulators tend to view the absence of documentation as an indication that the action did not occur. This caution applies to specified permit deadlines as well as permit actions, such as facility training and inspections that have no specified deadlines. Most permits require BMPs, which can entail some structural and nonstructural controls. The permittee may be asked to conduct annual facility personnel training and inspections as part of a BMP. Guidance documents listed in Appendices K and L offer a thorough review of BMPs. Implementation of BMPs may include the following:

- ◆ **Preventive maintenance of structural controls:** Inspect and maintain equipment and storm water related devices, such as oil/water separators, catch basins, and containment areas, on a consistent basis. Test facility equipment and systems for failure. Solutions may involve cleaning, repairing, or replacing the equipment or system. A thorough discussion of a variety of BMPs can be found in EPA's SWP3 guidance document, *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*, September 1992. Also refer to your SWP3 for recommended preventive measures.
- ◆ **Inspections:** Your SWP3 will require visual inspections of facility equipment and areas of potential SW contamination. Develop a standing operating

procedure (SOP) to track or follow-up on actions taken as a result of an inspection. Consider drafting a checklist of what areas to inspect and what to look for during the inspection. EPA's SWP3 guidance document contains many recommendations on inspection procedures. Remember to document all inspections.

- ◆ *Training:* Employee training programs are typically required. Good house-keeping, materials management practices, and spill response are typical topics covered in a training program. As discussed in Chapter 4, AEC provided a series of five 3-day intensive storm water training seminars during FY93 and will provide five additional rounds in FY94. *It is imperative that all installations send a representative to one of the introductory storm water seminars.* Topics covered during the introductory training seminars included:

- ▶ Introduction to storm water regulations
- ▶ Permit application process
- ▶ Army storm water permit status
- ▶ SWP3s
- ▶ Sampling procedures
- ▶ BMPs
- ▶ Recordkeeping
- ▶ Training
- ▶ Compliance with storm water program
- ▶ SOPs for Army installations
- ▶ Army strategies
- ▶ SARA Title III, construction permits and other issues.



Future training may focus on identifying Army-specific implementation problems, discussions of lessons learned, descriptions of BMPs that work well at Army installations, and previews of upcoming regulations. Also, the exportable training packages will be available by the end of 1994. Those packages include environmental awareness training at the field operations level.

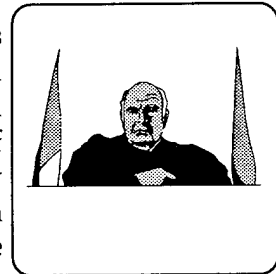
Your facility's SWP3 will not provide detailed requirements on how to implement the BMPs; it will merely describe the BMPs selected. The environmental/DEH/DPW staff at the installation will best know how to implement the BMPs identified in the plan. Know the history of the installation, the activities that have occurred, chemicals used on site now and in the past, and

the history of spills and other problems and maintain a list of installation contacts who can assist in providing such information.

Notices of Violation

WHAT IS A NOTICE OF VIOLATION?

An NOV³ is a formal, written notification issued by the regulatory authority citing violation of the regulations or, more specifically, of your permit conditions. You will be required to resolve the problem stated in the NOV in a timely manner. That resolution may be the easiest part of the task since a great deal of paperwork (within the Army and the regulatory body) is required by the NOV. An NOV consists of individual findings of violations, and the installation must comply with the regulation/permit to resolve it.



An NOV can come in one of three forms: a notice of deficiency (NOD), notice of noncompliance, or warning letter. While these enforcement mechanisms are each slightly different, for practical purposes they serve the same end. If an NOV is not resolved satisfactorily, the regulator may issue the installation an AO or a consent order (CO). For practical purposes, an AO and CO are similar. An AO is a legal document requiring the permittee to take specified actions within deadlines set by the regulator. An AO forces compliance by a certain date. Further court action involving fines, civil penalties, and even criminal charges may result if the installation fails to comply with an AO.

THE ARMY AND NOTICE OF VIOLATIONS

From April 1986 to June 1992, the Army received 1,617 NOV's containing 1,650 findings; only five of those NOV's were storm water related and they consisted of the following:

- ◆ Four entailed unauthorized discharge of waste (acid, sludge, waste oil) in storm water outfalls.
- ◆ One was a failure to monitor storm water discharges.

Do not be deceived by the fairly small number of storm water related NOV's issued to the Army since those numbers are a poor indication of compliance during that time period. The majority of industrial activities for which storm water contamination is an issue were not regulated until recently. Expect the number of NOV's to increase as



³States may have differing names for their enforcement actions. The following discussion applies to enforcement actions of all types, regardless of the nomenclature.

more and more storm water permits are issued. Violations are issued not only for unpermitted discharges but also for inadequate SWP3s. NOV's may also be issued after a state/EPA inspector audits the installation. If the inspector finds a violation, chances are that an NOV or NOD will follow (the length of time between violation and NOV issuance can range from 1 week to 16 months).

An NOV is a serious matter and requires immediate attention. Correct the problem immediately if you can. If you cannot correct it at once, it is good business practice to show your compliance efforts by sending a letter to authorities acknowledging the NOV and stating that you are developing a corrective action program. (The NOV will generally require you to submit a formal response letter and may even include required actions and implementation deadlines.) Table 6-2 lists other potential reasons for NOV issuance.



RECEIVING AN NOV – INTERNAL NOTIFICATION PROCEDURES

After receiving an NOV, your installation must notify the MACOM environmental staff and AEC as soon as possible. You must give AEC a copy of the NOV within 48 hours. The Army tracks NOV's using the Army Compliance Tracking System (ACTS). Various staff members at the MACOM or AEC may contact your office to better understand the reason for the NOV and to assist you in resolving the compliance problem.



The information you provide to AEC will be categorized and used for analytical purposes to better understand the underlying reasons for NOV's issued to the Army. AEC would like to know whether most NOV's result from administrative problems (e.g., incorrect signature on document, poor recordkeeping), operational problems (e.g., failure to monitor), or structural problems (e.g., "end-of-pipe technology" used is insufficient for compliance). AEC has adopted a set of reason codes to help categorize the problem. The codes are required as part of the ACTS records and are also useful when filling out report control system data base Forms 1383. Appendix P presents AEC's reason codes for NOV's. Where AEC identifies persistent Army-wide problems, it will initiate new or modified training programs to address these issues more effectively.

Table 6-2.
Reasons for NOV Issuance

NOV issuance can result from failure to do the following:

- ◆ Submit required reports
- ◆ Submit timely or adequate documentation, plans, etc., to regulators
- ◆ Respond to regulatory agency notices
- ◆ Perform required sampling and analysis
- ◆ Follow correct laboratory/certification procedures
- ◆ Provide adequate training to staff
- ◆ Conduct facility inspections as required by permit
- ◆ Provide proper operations and maintenance of equipment
- ◆ Meet numeric permit limits
- ◆ Maintain an accurate and complete SWP3
- ◆ Implement structural controls as specified in SWP3
- ◆ Report spills, releases, bypasses, and other unwanted discharges
- ◆ Comply with permit schedule/milestones in a timely manner
- ◆ Disclose information to Federal or state authorities
- ◆ Use proper signatures on documents

Numeric Effluent Limitations

Most permits regulate acidity or alkalinity (pH) and total suspended solids (TSS) in coal pile storm water runoff. Your permit may also specify numeric limits for other industrial activities. For example, in the EPA general permit, the maximum allowable concentration of TSS in coal pile runoff is 50 mg/l, and the pH must be between 6.0 and 9.0. In order to protect a body of water's designated use, states may impose water quality-based limits on industrial activities.



You cannot really "control" the concentration of pollutants that you find in the samples. Numeric limits are provided at a reasonable level to reflect unavoidable, undetected, or insignificant incidents. Your objective should be to eliminate all identifiable sources of storm water pollution. By doing that, you are most likely to be within the limits when the samples are taken. Remember, once the sample is taken, it must be recorded. *Be proactive in preventing pollution before*

the samples indicate the existence of contamination. Failure to meet numeric limits can result in enforcement action against the facility. Failure to report, or altering the report to hide known problems will result in enforcement action and possible criminal actions against those responsible.

If the installation exceeds its limits, try to resolve the problem with changes to nonstructural controls and practices. Better housekeeping, such as more diligent clean-up of storage areas, may help lower pollutant concentrations in storm water discharges, enabling your facility to stay in compliance. If those actions do not resolve the problem, you may need to modify existing structural controls (e.g., project-oriented controls such as structural barriers, berms, and catch basins), which can be expensive. Needless to say, utilize all feasible nonstructural controls before implementing any structural controls. When in doubt about what will work best in a given situation, consult the DEH or the MACOM/installation subject experts.

Signatory Requirements

For legal purposes, you must follow the signatory requirements specified in your permit. In most cases, authorization is given to a position with responsibility for overall operations, such as the Installation Commander, Garrison Commander, or an individual with equivalent responsibility for environmental matters (e.g., Chief of the Environmental Office). Two important points to remember:

- ◆ In order to delegate signatory responsibilities to an environmental manager, an authorized official (e.g., the Commander) must do so in writing to the regulatory agency with jurisdiction for storm water compliance (see Appendix M).
- ◆ The letter sent to regulators should delegate authority to positions rather than persons (e.g., delegate authority to the person with the title "Director, Engineering and Housing," as opposed to "Mr. Smith," who is the current Director). One reason for such delegation is that it will enable the Army to use a generic authorization letter to delegate responsibility, and that letter need not be updated for every change in personnel. NOVs have been issued simply because documentation of information about individuals has not kept pace with personnel turnovers.

The consequences of using an inappropriate signature on documents such as DMR forms and permit modification forms can range from expending more time and effort redoing the forms to being held liable for negligence and or falsification of documents.

Information and Plan Updates

Most permits require you to keep information and plans current. Notify your regulating authority in writing of any changes at the installation, such as elimination or addition of an activity, and then modify your SWP3 to reflect those changes. The reasons for amending an SWP3 are specified in your permit.



The EPA general permit clause entitled *Keeping Plans Current* states that plans shall be amended under one of the following conditions:

- ◆ Whenever a change in design, construction, operation, or maintenance has a significant effect on the potential for the discharge of pollutants to waters of the United States.
- ◆ If the SWP3 proves ineffective in minimizing pollutants. [Examples of ineffective SWP3s include continuing erosion control problems, evidence of stressed vegetation in the vicinity of regulated activities, and damaged containment structures (see Chapter 5).]
- ◆ If the SWP3 proves ineffective in achieving the objective of controlling pollutants in storm water.

Your regulating authority has access to review any amendments to the plan. Also, under the *Freedom of Information Act*, the general public may request to see the installation's SWP3. The SWP3 is a public document, and the public may have access to it.

Documentation and Recordkeeping

DOCUMENTATION

It is important to document all actions, correspondence, and other events related to your storm water program. Any actions taken (such as telephone calls to regulators, attempts to correct equipment failure, analyses, etc.) that represent a "good faith" effort on your part to correct a deficiency should be documented. The main purpose for that documentation is to protect yourself from compliance proceedings against the installation, by demonstrating good faith efforts and evidence of actions taken. You must use your own judgment when deciding what needs to be documented and what does not.

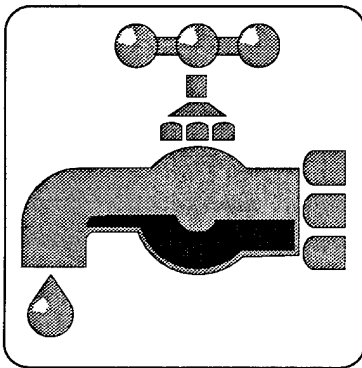
RECORDKEEPING

Make sure the files are in order at all times. The filing system should be clear and easy to understand. Filing by topic and chronology is one widely used

method. At a minimum, you should keep a telephone log and a meeting log on file. You may wish to develop standard forms to be used by your staff to make files more orderly. Your filing system becomes important when and if the regulator conducts an audit of your installation. A regulatory audit comprises several areas. The auditors will be analyzing all information at hand to determine whether the terms of your permit are being met. Most permits require you to keep a copy of all storm water-related documents for at least 1 year after the permit expires. The EPA requires sampling data to be kept for 6 years from the date of collection.



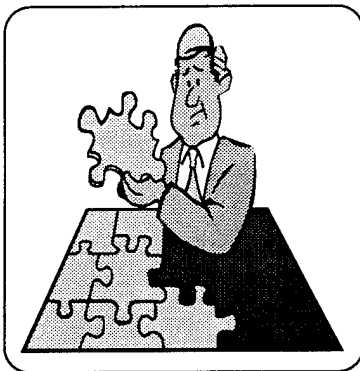
REPRESENTATIVE DISCHARGES



In the case of identical storm water outfalls, the EPA general permit allows you to test the effluent of one such outfall and report the data as applying to the other identical outfalls known as representative discharges. The installation's SWP3 should provide a detailed description of the outfalls and explain why the discharges are expected to be identical. Representative discharges mean that an industrial activity occurs in more than one location on site. Your installation's SWP3 should have already addressed the issue of identical outfalls, and you need only to refer to your SWP3. If identical outfalls are not addressed, discuss the situation with your SWP3 contractor.

CHAPTER 7

Running The Storm Water Program



FOLLOW YOUR INSTALLATION SWP3

It is up to you and your staff to implement the SWP3 once it is written. It should contain specific requirements for maintenance of structural controls, site evaluations and inspections, training, etc. You should be sure to follow your plan exactly and within the time frames specified. *Your SWP3 is a living document that must be continuously updated to reflect any changes at your installation.* The EPA believes the number one cause of storm water NOV's in the future will be failure to implement the SWP3 as written.

MAINTAIN CONTINUOUS CONTACT WITH REGULATORS

You should develop and maintain a good relationship with your point of contact at the regulating authority. In general, regulators see their mission as ensuring that the regulated facilities voluntarily comply. Voluntary compliance provides them with an important indicator and assurance of long-term compliance. The regulators are interested in cooperating with an installation that really seems to be trying and is proactive. Build an atmosphere of good faith and credibility. You would like the regulators to work *with* you, rather than *against* you. A professional, courteous, open, and cooperative approach will likely prove most successful.



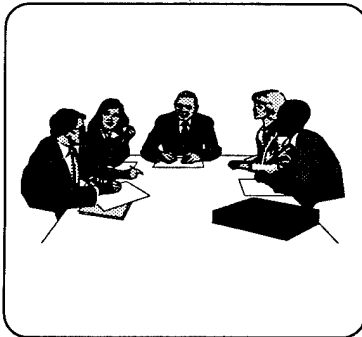
Specific communications with the regulators will be necessary for the following reasons:

- ◆ To learn, in a timely manner, of any changes to the regulations or any new regulations that will affect your installation. Stay one step ahead, and plan your environmental budgets accordingly.
- ◆ To notify your point of contact, where applicable, of any problems occurring at your site. Most permits discuss actions that need to be taken in case of incidents, such as spills, and other reporting requirements. Common requirements include the following:
 - ▶ *Releases in excess of reportable quantities.* When a release contains a hazardous substance in amounts greater than or equal to reportable

quantities as specified in 40 CFR 117 or 40 CFR 302, during a 24-hour period, most permits will require you to take the following actions:

- ◆ Notify the National Response Center (1-800-424-8802) and/or designated state agency as soon as possible
 - ◆ Modify your SWP3 within 14 calendar days of knowledge of the release, as outlined in your permit
 - ◆ Submit written details of the release to your regulator within 14 calendar days, as outlined in your permit.
- ▶ *Multiple anticipated discharges.* When your installation anticipates more than one discharge a year in amounts greater than or equal to reportable quantities under 40 CFR 117 or 40 CFR 302, follow the same procedures.

Maintaining continuous contact shows a good faith effort to comply with the storm water requirements.



ESTABLISH EFFECTIVE WORKING RELATIONSHIPS

Apart from the need for external communications with regulators, additional interactive requirements are important for effective program execution. Administering an effective storm water program depends on your ability to coordinate expertise from different functional areas of the installation. Although your group may be in charge of implementing this program, you need the cooperation of other departments to do so successfully. It is up to you to recognize other departments/directorates/offices whose cooperation you need, what information you need from them, how to retrieve that information, and the effects of other programs on your program.

Your SWP3 should contain a detailed description of the responsibilities assigned to each pollution prevention team member. Whom should your team include? A good team includes those personnel most familiar with the installation and its operations. To be effective, the team should not have more than 15 to 20 members. Reserve SWP3 teams are much smaller in size and may consist of only three members. The team is responsible for establishing good channels of communication with top military officials and ensuring that everyone is able to function in a cooperative partnership. The team should consist of representatives from all areas of operations. If it does not, then it is important at least to establish

strong relationships with a number of organizations both within the installation and outside it.

The following subsections present summaries of recommended internal and external interactions. Internal refers to departments located at the installation, while external refers to agencies and/or other Army commands outside of the installation.

Internal Interactions

Establish strong relationships with the following organizations within your installation.

Directorate of Engineering and Housing¹ Environmental Office. By keeping an open channel with DEH/DPW, you will stay informed of construction and land management changes or activities occurring on site. Storm water associated with construction is a regulated activity. The Army Corps of Engineers usually manages all military construction Army (MCA) projects. MCA projects are typically projects with a budget greater than \$300,000. You may need to coordinate efforts with the USACE concerning these projects because any changes to land usage may affect your storm water program. Have a point of contact in the following DEH offices:



- ◆ *Natural Resources Office (NRO)*, to discuss changes to land management or the Integrated Training Area Management Plan (ITAM)
- ◆ *Civil Engineering and Public Works Office*, to address any storm water issues arising from construction or piping activities
- ◆ *Safety Office*, to receive updates on materials safety data sheets
- ◆ *Environmental Office*, to coordinate efforts.

Directorate of Logistics (DOL). With a contact in the DOL, you should be able to update your chemicals inventory list. Current information on chemicals inventory is important since chemicals used on base may affect the quality of your storm water discharges. What chemicals are purchased by your installation? Do those chemicals come into contact with storm water at any time? Will those chemicals contaminate storm water runoff? The point of contact should be the installation DOL; you should also become acquainted with the supply officers for the units and activities. You should discuss any changes to inventory, storage, distribution procedures, and loading/unloading areas with the supply officers.



¹DEH may now be referred to as the Directorate of Public Works (DPW).

Defense Reutilization and Marketing Office (DRMO). Because DRMO typically administers recycling and hazardous waste disposal operations at most Army installations, you are responsible for becoming aware of any changes in storage or disposal methods used on site. Familiarize yourself with changes made in the way materials are processed, stored, or stockpiled and changes in the demilitarization of equipment. In addition, the point of contact at the DRMO should be able to tell you of any operational changes at Resources Conservation and Recovery Act (RCRA) hazardous waste storage facilities.

Troop Unit Commanders/Supervisors. Maintain an open line of communication with the Troop Unit Commanders or civilian counterparts of regulated activities (e.g., airfields, sewage treatment plants, hazardous waste storage facilities, and motor pools) on base. The main reason for doing so is to stay informed of any changes that may affect storm water flow or contamination. For example, changes to contamination flow patterns of your storm water caused by the redirection of traffic to a new airfield runway, is something you need to be aware of.

Provost Marshal's Office. The Provost Marshal's Office provides security around activities such as DRMO and treatment facilities. Contacts at this office can provide important information through their daily routine visual surveillance of the installation.

Fire Marshal. Most likely, the Fire Marshal's Office will be the first to respond to incidents such as spills. It cleans up spills and provides for initial containment of accidental releases, information that you need for recordkeeping if such occurrences affect storm water.

Installation Safety and Occupational Health Office. At many installations, except for the Army Reserves, this office may be a component of DEH. Any changes to the installation, Army, state and/or Federal health and safety regulations or policies may affect your program.

Hospital. The installation's medical activity will have a preventive medicine group. That group may be responsible for sampling activities and will have historical knowledge of pollution incidents and workplace safety and health issues.



External Interactions

You should also establish relationships with the following organizations external to your installation.

Army Environmental Center. AEC can provide technical and program management support to the field. It is actively involved in the permitting process and SWP3 guidance, as well as in providing and implementing short-term and long-term strategies for the Army's storm water program. Along with the

MACOMs, AEC is conducting initial storm water training programs for installation personnel and quarterly storm water IPRs. AEC should be one of your first points of contact for storm water issues. It has access to a variety of program support and can direct you to the appropriate persons for assistance. Main non-Army technical support agencies/companies include:



- ◆ *U.S. Geological Survey.* USGS provides technical assistance, especially with monitoring, permit applications, and sampling issues.
- ◆ *Environmental Science & Engineering.* ES&E provides classroom storm water training to installation environmental coordinators.
- ◆ *Universal Systems Inc.* USI is developing the Army's exportable training packages.
- ◆ *Logistics Management Institute.* LMI provides policy analysis, strategy development, pollution prevention research, training, and other miscellaneous program support.

For access to these AEC-contracted agencies/companies, contact your AEC representative.

Major Army Command Staff. The MACOMs can provide your installation with additional support. Coordinate with MACOM personnel to ensure that your actions are in compliance with Army policy and MACOM guidance. A major function of MACOMs is to provide uniform guidance to installations and to be a source for funding and training. The MACOM staff may have some unique capabilities. Utilize their expertise!

U.S. Army Corps of Engineers. Your point of contact in the USACE should be the person in the District office who is responsible for providing day-to-day support to DEH. The DEH typically handles all construction projects costing more than \$300,000. Projects managed by USACE may affect you indirectly, depending upon the number of acres disturbed during construction. The USACE can provide you with construction guidance. You should also establish communications with the following organizations within the Corps of Engineers:



- ◆ *Construction Engineering Research Laboratory.* CERL provides technical support for a number of programs, including storm water. CERL's primary interest and expertise is in SWP3 structural technologies (i.e., advanced BMPs). Thus, it has the capacity to develop Army SWP3 structural technology.

Army Environmental Hygiene Agency. This agency can play a supporting role in your storm water program. Waste water sampling, laboratory analyses, draft

permit reviews, surveys, and other studies are some of the areas in which AEHA can provide technical assistance to your installation. In fact, AEHA may have been involved in filing the storm water permit application for your installation. AEHA provides assistance on site as well as via telephone.

Regulators. As expressed throughout this document, you must establish a strong working relationship with appropriate Federal, state, and local regulatory agencies. You must keep contacts in those agencies informed of major modifications to installations that impact your storm water program, and maintain a liaison so that you can be updated on impending regulations and statutes. Appendix C presents points of contact with the regulating authority.

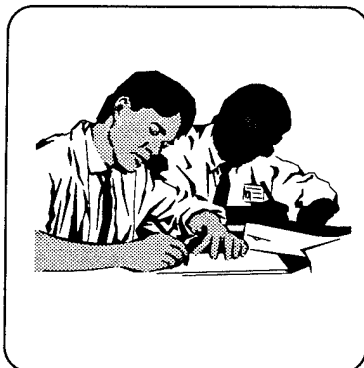


Municipalities. Most likely, your permit will contain additional requirements for storm water discharges associated with industrial activities through a municipal separate storm sewer system (MS4). The permit language is usually written to allow MS4 representatives access to facility files and information. EPA's general storm water permit contains a clause that states, "Permittees which discharge storm water through an MS4 (serving a population greater than 100,000) shall make plans available to municipal operators upon request." Be aware that some state permits may contain more stringent MS4 notification requirements (e.g., a requirement to submit a copy of the installation's SWP3 annually).

Contractors. If you do not have the manpower or the in-house expertise to implement parts of your permit, you may need to hire a contractor. Storm water sampling, toxicity testing, monitoring, and implementation of structural BMPs are some activities for which you may use a contractor. Use of a contractor is up to you. Take into consideration your budget, time, manpower, the urgency of the task, and the role USACE might take in contractor utilization.

Appendix Q provides a list of important storm water contacts and phone numbers.

BUILD ON EXISTING ENVIRONMENTAL PLANS AT YOUR INSTALLATION



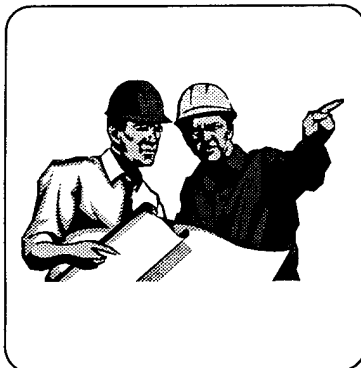
Your installation may have already incorporated storm water management practices into day-to-day operations as part of an environmental plan required by other regulations. Elements of the SWP3 may coincide with those of other plans, and you may be able to build upon those other plans or at least to coordinate effectively to decrease duplication. Incorporate those plans into your SWP3 by reference; it will make your SWP3 more

compact and you will avoid having to update the SWP3 to reflect changes in other plans. *Do not replicate other existing plans in your SWP3.*

The following environmental plans may augment the storm water program as well as provide a reference upon which to build your storm water program:

- ◆ *Preparedness Prevention and Contingency Plan (PPCP) (40 CFR 264, 265).* This plan requires hazardous wastes to be identified at the installation. A good source of information on hazardous wastes is the installation's PPCP coordinator.
- ◆ *Spill Control and Countermeasure Plan (SPCC) (40 CFR 112).* This plan requires information on the storage of petroleum, oils and lubricants (POL). You should coordinate your efforts in this area with the designated person accountable for oil spill prevention.
- ◆ *NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469).* This plan requires identification of toxic organic compounds used at the installation. A good source for information on toxic organic compounds is your NPDES or Clean Water Act subject expert.
- ◆ *OSHA Emergency Action Plan (29 CFR 1910).* This plan requires a listing of potential workplace fires and other emergency hazards as well as plans to prevent or respond to such activities.
- ◆ *Installation Spill Contingency Plan (ISCP) (AR 200-1).* This internal Army plan requires installations to identify existing clean-up procedures for many of the sites and specify the location at which the clean-up chemicals are stored.

Persons who know the contents of these plans are good candidates for your SWP3 team. It is not uncommon for environmental staff to take an integrated plan approach. For example, storm water inspections can be conducted in conjunction with inspections required by other environmental plans. Refer to Appendix R for details of potentially relevant elements of the first four federally required environmental plans.



MAJOR CHANGES ON-SITE

What do you do when major changes occur on site? Installing a new landfill, relocating motor pools, and closing or realigning bases are some examples of changes that will affect your storm water program.

New Operations

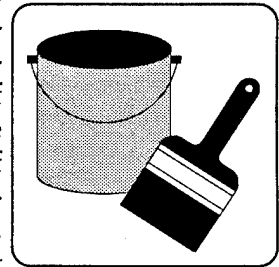
What should you do when your installation is conducting new operations (e.g., a regulated industrial activity) on site? For example, if you are building a new sewage treatment plant, or other new buildings (e.g., a storage warehouse) on site, you will need to do the following:

- ◆ Notify proper authorities (construction of new buildings may fall under a storm water construction permit)
- ◆ Amend the SWP3 to reflect the changes
- ◆ Incorporate storm water pollution prevention in the design of the new operation.

Most permits require you to provide your regulatory authority with written notification and a description of the new operations a specified number of days prior to the commencement of the new activity. *Even if you believe that these new operations will not affect the quality of the storm water in that area, you should submit the notification, and indicate your viewpoint.* State why the new operations will have no impact on storm water discharges.

Modifications to Existing Operations

Modifications to existing operations may include the addition of a new industrial activity (such as painting, degreasing operations, or new motor pool area). Treat a modification similarly to the way you treat new operations. If required by your regulator, submit a letter describing the modification and how it will or will not affect the nature of current storm water discharges. Modify your SWP3 to reflect changes in the time frame specified by your permit. Regulatory agencies may request that you submit sampling data from the modified activity.



Termination of Operations

The termination of an on site operation is to be treated as a modification. Submit written notification of termination of that operation where stipulated in permit conditions and request a permit modification to reflect the changes. In most cases, you will be required to amend your SWP3. The following section summarizes the effects of base realignment and closure (BRAC) on installations with a storm water permit.

Base Realignment and Closure

An installation undergoing base realignment and closure (BRAC) will not necessarily be exempt from NPDES storm water permitting requirements. In many instances, a permit and (possibly) BMP implementation milestones will be established by the regulatory authority and will precede BRAC activity. Should your installation require a storm water permit, you should contact the regulatory agency and inform them of your BRAC status. Some installations, such as Jefferson Proving Ground, are required to maintain a storm water permit even after base closure. Discuss with the regulators how to meet storm water requirements while taking BRAC into consideration.

States and EPA regions will most likely require that your installation comply with storm water permit requirements while regulated industrial activities continue in operation. When the BRAC process is completed and such activities have ceased, a Notice of Termination (NOT) should be sent to the regulatory agency stating that storm water discharges associated with industrial activity have been eliminated. An NOT can take the form of a letter requesting the termination of your NPDES permit, explaining the cessation of industrial activity, and enclosing a signed certification stating all activities have terminated.

During the course of base closure activities, installations must modify their SWP3s as regulated activities are eliminated. From a strategic perspective, those installations should utilize nonstructural BMPs where necessary to comply with permit conditions. It would be inefficient and futile to implement structural BMPs that will be eliminated during BRAC.

CHAPTER 8

Looking Ahead



EPA'S STRATEGY: TIERED PERMITTING

How Does the Strategy Progress?

When issuing permits, the EPA uses a four-tier set of priorities to be implemented over time. We are currently in Tier I - *baseline permitting*. EPA has not given any indication of when Tiers II - IV will be implemented.¹ An outline of the progression in EPA's permitting strategy is provided below:

- ◆ Tier I - *Baseline permitting*. On the basis of studies, EPA has targeted those industrial activities found to have a significant impact on the quality of storm water runoff.
- ◆ Tier II - *Watershed permitting*. In this tier, EPA will target those facilities within watersheds where the water quality has been shown to be adversely affected by storm water discharges associated with industrial activity.
- ◆ Tier III - *Industry-specific permitting*. In Tier III, EPA will target specific industrial categories for individual or industry-specific permits.
- ◆ Tier IV - *Facility-specific permitting*. In Tier IV, EPA will target specific facilities for individual permits.

How Does This Strategy Affect Your Installation?

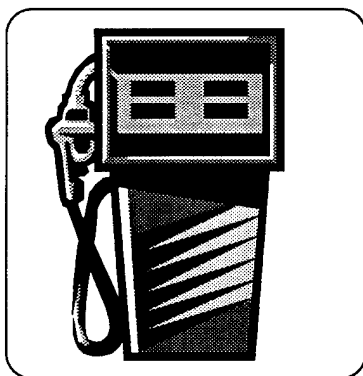
If you are *not currently covered by a permit or do not need a permit*, the more stringent conditions of the tiers beyond Tier I may necessitate your applying for a permit at a future date. This may be the case for those Reserve installations that are not part of the group application (currently, only 146 out of more than 1,000 Reserve installations are seeking permit coverage).

If you are *located in a state in which EPA is the regulating authority*, your installation may have to deal with additional requirements in the future. The new requirements based on Tiers II - IV are highly likely to be more stringent than the permit you have now. The more stringent requirements may come in the form of

¹The proposed multi-sector permit has some elements of these tiers. It may be that your state-issued permit may also contain elements of these tiers.

water quality-based numeric limits for certain pollutants, additional monitoring or sampling requirements, or additional regulated activities.

If you are *located in a NPDES state*, chances are that water quality requirements have already been addressed. In that case, your installation may not be the recipient of a modified permit. If the state alters its permitting strategy, the new strategy will probably take effect after your permit expires and during the permit renewal stage.



STORM WATER PROGRAM — PHASE II

Section 402(p)(6) of the Clean Water Act mandates Phase II of the national storm water program to target those areas “that are not currently covered.” At present, EPA is still seeking clarification of exactly what that means. Examples of potential Phase II discharges that may be regulated are MS4s serving populations of less than 100,000; all other industrial activities not regulated in Phase I; commercial activities with industrial components (e.g., gas stations); large parking lots; recreational facilities; and residential property.

The 9 September 1992 Federal Register refers to a Phase II storm water Proposed Rule. That 9 September reference sought comments on the three major components of Phase II still under debate:

- ◆ *Targeting strategies and scope of coverage.* Identify activities and other discharges to be regulated under Phase II.
- ◆ *Control strategies.* Decide who must run Phase II and whether it will be done at the Federal level or the state level, with mandatory nationwide controls or regional authority.
- ◆ *Deadlines.* When the decisions must be made and the timetable for Phase II discharges.

This proposed ruling can have a significant impact on the Army, depending on what is regulated. Many of the smaller reserve installations that currently are not regulated may need to obtain permits or take some other specified actions. The *Phase II Draft Report to Congress* was published in October 1993. The Executive Summary of this report is provided for your reference in Appendix S.

Glossary

DB 1383	=	1383 Army data base system
A/E	=	Architect/Engineering
ACSIM	=	Assistant Chief of Staff for Installation
ACTS	=	Army Compliance Tracking System
AEC	=	Army Environmental Center
AEHA	=	Army Environmental Hygiene Agency
AHSC	=	Army Health Services Command
AMC	=	Army Materiel Command
AO	=	Administrative Order
ARCOM	=	Army Reserves Command
BIFs	=	Boilers and Industrial Furnaces
BMP	=	Best Management Practice
BOD	=	Biochemical Oxygen Demand
BRAC	=	Base Realignment and Closure
CERCLA	=	Comprehensive Environmental Response, Compensation, and Liability Act
CERL	=	Construction Engineering Research Laboratory
CFR	=	Code of Federal Regulations
CO	=	Consent Order
COD	=	Chemical Oxygen Demand
CPW	=	Center for Public Works
CSA	=	Chief of Staff of the Army

CWA	=	Clean Water Act
DA	=	Department of the Army
DEH	=	Directorate of Engineering and Housing
DENIX	=	Defense Environmental Network Information Exchange
DMR	=	Discharge Monitoring Report
DoD	=	Department of Defense
DOL	=	Directorate of Logistics
DPW	=	Directorate of Public Works
DRMO	=	Defense Reutilization and Marketing Office
DSHE	=	Directorate of Safety, Health and Environment
EIS	=	Environmental Impact Statement
EPA	=	Environmental Protection Agency
EPCRA	=	Emergency Planning and Community Right to Know Act
ESA	=	Endangered Species Act
ES&E	=	Environmental Science & Engineering, Inc.
FONSI	=	Finding of No Significant Impact
FORSCOM	=	Forces Command
FOTW	=	Federally Owned Treatment Works
GOCO	=	Government Owned Company Operated
HSC	=	Health Services Command
IPR	=	In-Progress Review
ISC	=	Information Systems Command
ISCP	=	Installation Spill Contingency Plan
ITAM	=	Integrated Training Area Management

JAG	=	Judge Advocate General
LEPC	=	Local Emergency Planning Committee
LMI	=	Logistics Management Institute
MACOM	=	Major Army Command
MCA	=	Military Construction Army
MDW	=	Military District of Washington
MS4	=	Municipal Separate Storm Sewer System
MSC	=	Major Subordinate Command
MSDS	=	Material Safety Data Sheet
NEPA	=	National Environmental Policy Act
NGB	=	National Guard Bureau
NHPA	=	National Historic Preservation Act
NOD	=	Notice of Deficiency
NOI	=	Notice of Intent
NOT	=	Notice of Termination
NOV	=	Notice of Violation
NPDES	=	National Pollutant Discharge Elimination System
NRO	=	Natural Resources Office
NSPS	=	New Source Performance Standards
NURP	=	National Urban Runoff Program
O&M	=	Operation and Maintenance
ODEP	=	Office of the Director of Environmental Programs
OSHA	=	Occupational Safety and Health Act
P.E.	=	Professional Engineer

POTW	= Publicly Owned Treatment Works
PPCP	= Preparedness Prevention and Contingency Plan
RCRA	= Resource Conservation and Recovery Act
RQ	= Reportable Quantity
SARA	= Superfund Amendments and Reauthorization Act
SERC	= State Emergency Response Commission
SIC	= Standard Industrial Classification
SOP	= Standing Operating Procedure
SPCC	= Spill Prevention Control and Countermeasures
SWP3/SWPPP	= Storm Water Pollution Prevention Plan
THAMA	= Toxic and Hazardous Materials Agency (now known as AEC)
TPQ	= Threshold Planning Quantity
TRADOC	= Training and Doctrine Command
TRI	= Toxic Release Inventory
TSP	= Training Support Package
TSS	= Total Suspended Solids
USACE	= U.S. Army Corps of Engineers
USGS	= U.S. Geological Survey
USI	= Universal Systems Inc.
USMA	= U.S. Military Academy
WET	= Whole Effluent Toxicity

APPENDIX A

Standard Industrial Classification
(SIC) Codes

Standard Industrial Classification (SIC) Codes

Major Group No./Industry Group No.¹

- 10 Metal Mining
 - 101 Iron ores
 - 102 Copper ores
 - 103 Lead and zinc
 - 104 Gold and silver ores
 - 106 Ferroalloy ores, except vanadium
 - 109 Miscellaneous metal ores
- 12 Coal Mining
- 13 Oil and Gas Extraction
- 14 Mining and Quarrying of Nonmetallic Minerals, except Fuels
 - 141 Dimension stone
 - 144 Sand gravel
 - 145 Clay, ceramic, and refractory minerals
 - 147 Chemical and fertilizer mineral mining
 - 149 Miscellaneous nonmetallic minerals, except fuels
- 20 Food and Kindred Products
- 21 Tobacco Products
- 22 Textile Mill Products
- 23 Apparel and Other Finished Products made from Fabrics and Similar Materials
- 24 Lumber and Wood Products, except Furniture
- 25 Furniture and Fixtures
- 26 Paper and Allied Products

¹Industry codes shown only if applicable to Army facilities. Otherwise only the major code is shown. Information taken from U.S. Army Environmental Hygiene Agency (USAEHA) Water Quality Information Paper #36, "National Pollutant Discharge Elimination System (NPDES) Permit Application Requirements for Storm Water Discharges, 1 March 1991.

- 27 Printing, Publishing, and Allied Industries
- 28 Chemicals and Allied Products
 - 281 Industrial inorganic chemicals
 - 286 Industrial organic chemicals
 - 289 Miscellaneous chemical products
 - 2892 Explosives
 - 2899 Chemicals and chemical preparations, not elsewhere classified
- 29 Petroleum Refining and Related Industries
- 30 Rubber and Miscellaneous Plastics Products
- 31 Leather and Leather Products
- 32 Stone, Clay, Glass, and Concrete Products
- 33 Primary Metal Industries
 - 331 Steel works, blast furnaces, rolling and finishing mills
 - 332 Iron and steel foundries
 - 333 Primary smelting and refining of nonferrous metals
 - 334 Secondary smelting and refining of nonferrous metals
 - 335 Rolling, drawing, and extruding of nonferrous metals
 - 336 Nonferrous foundries (castings)
 - 339 Miscellaneous primary metal products
- 34 Fabricated Metal Products, except Machinery and Transportation Equipment
 - 346 Metal forging and stamping
 - 347 Coating, engraving, and allied services
 - 348 Ordinance and accessories, except vehicles and guided missiles
 - 3482 Small arms ammunition
 - 3483 Ammunition, except for small arms
 - 3484 Small arms
 - 3489 Ordinance and accessories, not elsewhere classified
- 35 Industrial and Commercial Machinery and Computer Equipment
- 36 Electronic and Other Electrical Equipment and Components, except Computer Equipment

- 37 Transportation Equipment
 - 371 Motor vehicles and motor vehicle equipment
 - 372 Aircraft and parts
 - 379 Miscellaneous transportation equipment
 - 3795 Tanks and tank components
- 38 Measuring, Analyzing, and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks
 - 381 Search, detection, navigation, guidance aeronautical and nautical systems, instruments and equipment
- 39 Miscellaneous Manufacturing Industries
- 40 Railroad Transportation
 - 401 Railroads
- 41 Local and Suburban Transit and Interurban Highway Passenger Transportation
- 42 Motor Freight Transportation and Warehousing
 - 421 Trucking and courier services, except air
 - 423 Terminal and joint terminal maintenance facilities for motor freight transportation
- 43 United States Postal Service
- 44 Water Transportation
- 45 Transportation by Air
 - 458 Airports, flying fields, and terminal services
- 51 Wholesale Trade Nondurable Goods
 - 517 Petroleum and petroleum products
 - 5171 Petroleum bulk stations and terminals

APPENDIX B

Typical Regulated Activities
on Army Installations

Typical Regulated Activities¹ on Army Installations

- ◆ Automobile junkyards or cannibalization points, where drainage occurs or automotive fluids are stored.
- ◆ Battery reclaimers: includes areas used for storing lead-acid batteries, reclamation products, or waste products and areas used for lead-acid battery reclamation.
- ◆ Coal-fired steam electric plants
- ◆ Coal pile runoff
- ◆ Fixed-wing and/or rotary-wing aircraft activities
- ◆ Hazardous waste storage facilities and loading areas
- ◆ Land disposal units/incinerators/boilers and industrial furnaces: includes active or inactive landfills, land application sites and open dumps without a stabilized final cover.
- ◆ Materials stockpiled for recycling operations
- ◆ Oil and wood handling sites at oil/wood-fired steam electric plants
- ◆ Open burning/open detonation (OB/OD) sites
- ◆ Section 313, *Water Priority Chemicals*²
- ◆ Sewage treatment facilities
- ◆ Ship building and repairing activities
- ◆ Tactical vehicle motor pools and supporting vehicle maintenance activity centers, which conduct vehicle maintenance activities.

¹Storm water discharges that come into contact with above listed activities.

²SARA Title III, Section 313 requirements are applicable only if the installation manufactures or processes more than 25,000 pounds of a regulated substance or if the substance is otherwise used in quantities exceeding 10,000 pounds annually.

APPENDIX C

State Permitting Authorities

State Permitting Authorities

Table C-1.
State Permitting Authorities (as of March 1994)

STATE	FEDERAL FACILITIES AUTHORITY	POINTS OF CONTACT	TELEPHONE
Alabama	Alabama	John Poole	(205) 271-7852
Alaska	EPA Region 10 — WA	Steve Bubnick Kathy Collins	(206) 553-8399
Arizona	EPA Region 9 — CA	Eugene Bromley	(415) 744-1906
Arkansas	Arkansas	Steve Patrick Mark Bradley	(501) 562-7444
California	California	Archie Matthews Jessie M. Diez, Chief	(916) 657-1110 (916) 657-0756
Colorado	EPA Region 8 — CO	Bob Shankland Vernon Berry	(303) 293-1260
Connecticut	Connecticut	Don Gonyea Chris Stone	(203) 566-7167
Delaware	EPA Region 3 — PA	Kevin Magerr	(215) 597-1651
District of Columbia	EPA Region 3 — PA	Kevin Magerr	(215) 597-1651
Florida	EPA Region 4 — GA	Chris Thomas	(404) 347-2391
Georgia	Georgia	Will Salter	(404) 656-4887
Hawaii	Hawaii	Mark Tomomitsu Dennis Lau, Chief	(808) 586-4309
Idaho	EPA Region 10 — WA	Steve Bubnick Kathy Collins	(206) 553-8399
Illinois	Illinois	Sue Epperson Timothy Kluge	(217) 782-0610
Indiana	Indiana	Katherine Hess Laura Bieberich	(317) 232-8704
Iowa	Iowa	Monica Wnuk Terry Kirshenman	(515) 281-7017 (515) 281-8693
Kansas	Kansas	Eric Staab Don Carlson	(913) 296-5547
Kentucky	Kentucky	Doug Allgeier	(502) 564-3410
Louisiana	EPA Region 6 — TX	Paulette Johnsey Brent Larsen	(214) 655-7185

Note: EPA = Environmental Protection Agency.

Table C-1.
State Permitting Authorities (as of March 1994) (Continued)

STATE	FEDERAL FACILITIES AUTHORITY	POINTS OF CONTACT	TELEPHONE
Maine	EPA Region 1 — MA	Shelly Puleo Jay Brolin	(617) 565-3525 (617) 565-3590
Maryland	Maryland	Don Jones Ed Gertler, Chief	(410) 631-3323
Massachusetts	EPA Region 1 — MA	Shelly Puleo Jay Brolin	(617) 565-3525 (617) 565-3590
Michigan	Michigan	Gary Scheuren Gary Boersen	(517) 373-1326
Minnesota	Minnesota	Scott Thompson	(612) 296-7203
Mississippi	Mississippi	Ken La Fleur Louis Lavalee, Chief	(601) 961-5192 (601) 961-5074
Missouri	Missouri	Karl Felt Richard Laux	(314) 751-6982
Montana	Montana	Amanda Domino Roxanne Lincoln	(406) 444-2406 (406) 444-5338
Nebraska	Nebraska	David Ihire	(402) 471-4239
Nevada	Nevada	Rob Saunders John Nelson, Supervisor	(702) 687-5870
New Hampshire	EPA Region 1 — MA	Shelly Puleo Jay Brolin	(617) 565-3525 (617) 565-3590
New Jersey	New Jersey	Ed Frankel Janet Jessel	(609) 633-7021 Hotline x7026
New Mexico	EPA Region 6 — TX	Brent Larsen	(214) 655-7185
New York	New York	Ken Stevens	(518) 457-1157
North Carolina	North Carolina	Steve Ulmar Bill Mills	(919) 733-5083
North Dakota	North Dakota	Jim Collins	(701) 221-5210
Ohio	Ohio	Mohammed Islam John Morrison	(614) 644-2008 Hotline x3425, x2053
Oklahoma	EPA Region 6 — TX	Paulette Johnsey Brent Larson	(214) 655-7185

Note: EPA = Environmental Protection Agency.

Table C-1.
State Permitting Authorities (as of March 1994) (Continued)

STATE	FEDERAL FACILITIES AUTHORITY	POINTS OF CONTACT	TELEPHONE
Oregon	Oregon	Keith Anderson Ranei Nomura	(503) 229-5876
Pennsylvania	Pennsylvania	Cuong Vu Ken Yuran	(717) 787-8184 (717) 783-7577
Rhode Island	Rhode Island	Connie Carey Christopher Feeney	(401) 277-6519
South Carolina	South Carolina	Arturo Ovalles	(803) 734-5257
South Dakota	EPA Region 8 — CO	Vernon Berry Bob Shankland	(303) 293-1647
Tennessee	Tennessee	Tom Roehm Robert Haley	(615) 532-0625
Texas	EPA Region 6 — TX	Paulette Johnsey Brent Larsen	(214) 655-7185
Utah	Utah	Mark Schmitz Henry Campbell	(801) 538-6146
Vermont	Vermont	Todd Sternbach Brian Koiker	(802) 241-3822
Virginia	Virginia	Bert Tuxford Cathy Boatwright	(804) 527-5083 (804) 527-5316
Washington	EPA Region 10 — WA	Kathy Collins	(206) 553-2108
West Virginia	West Virginia	Art Vickers	(304) 558-8855
Wisconsin	Wisconsin	Kimberly Knudsen Paul Luebke Anne Mauel	(608) 264-6262 (608) 266-0234
Wyoming	Wyoming	John Wagner Marissa Latady	(307) 777-7082 (307) 777-3588
American Samoa	EPA Region 9 — CA	Eugene Bromley	(415) 744-1906
Guam	EPA Region 9 — CA	Eugene Bromley	(415) 744-1906
Puerto Rico	EPA Region 2 — NY	Jose Rivera	(212) 264-1859
Virgin Island	EPA Region 2 — NY	Jose Rivera	(212) 264-1859

Note: EPA = Environmental Protection Agency.

APPENDIX D

State Permitting Options

State Permitting Options

Table D-1.
State Permitting Options (as of March 1994)

State	Individual	General	Group ^a
Alabama	Yes	State	No
Alaska	Yes	Federal	Yes
Arizona	Yes	Federal	Yes
Arkansas	Yes	State	Yes
California	Yes	State	No
Colorado	Yes	Federal+	Yes
Connecticut	Yes	State	No
Delaware	Yes	Federal+	Yes
District of Columbia	Yes	Federal	Yes
Florida	Yes	Federal	Yes
Georgia	Yes	State	No
Hawaii	Yes	State	Yes
Idaho	Yes	Federal	Yes
Illinois	Yes	State	Yes
Indiana	Yes	State	No
Iowa	Yes	State	Yes
Kansas	Yes	No	Yes
Kentucky	Yes	State	Yes
Louisiana	Yes	Federal	Yes
Maine	Yes	Federal	Yes
Maryland	Yes	State	Yes
Massachusetts	Yes	Federal	Yes
Michigan	Yes	No	Yes
Minnesota	Yes	State	No
Mississippi	Yes	State	Yes

Note: Federal + = EPA has Federal Facilities Authority.

^aState may use EPA's proposed multi-sector permit.

Table D-1.
State Permitting Options (as of March 1994) (Continued)

State	Individual	General	Group ^a
Missouri	Yes	State	No
Montana	Yes	State	No
Nebraska	Yes	State	Yes
Nevada	Yes	State	No
New Hampshire	Yes	Federal	Yes
New Jersey	Yes	State	No
New Mexico	Yes	Federal	Yes
New York	Yes	State	Yes
North Carolina	Yes	State	Yes
North Dakota	Yes	State	Yes
Ohio	Yes	State	Yes
Oklahoma	Yes	Federal	Yes
Oregon	Yes	State	No
Pennsylvania	Yes	State	No
Rhode Island	Yes	State	Yes
South Carolina	Yes	State	Yes
South Dakota	Yes	Federal	Yes
Tennessee	Yes	State	Yes
Texas	Yes	Federal	Yes
Utah	Yes	State	Yes
Vermont	Yes	No	Yes
Virginia	Yes	State	No
Washington	Yes	Federal+	Yes
West Virginia	Yes	State	No
Wisconsin	Yes	State	Yes
Wyoming	Yes	State	No
American Samoa	Yes	Federal	Yes
Guan	Yes	Federal	Yes
Puerto Rico	Yes	Federal	Yes
Virgin Islands	Yes	Federal	Yes

Note: Federal + = EPA has Federal Facilities Authority.

^aState may use EPA's proposed multi-sector permit.

APPENDIX E

EPA General Permit
9 September 1992 *Federal Register*

Wednesday
September 9, 1992

Final NPDES General Permits

For Storm Water Discharges Associated With Industrial Activity

Non Construction-Industrial
Permit Language

Part III

Environmental Protection Agency

Final NPDES General Permits For Storm
Water Discharges Associated With
Industrial Activity; Permit Language

Appendix B—NPDES General Permits for Storm Water Discharges Associated with Industrial Activity

Permit No. MER00000IF

Authorization to Discharger Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.; the Act), except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, for Indian Tribes located in the State of Maine, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on _____.

This permit and the authorization to discharge shall expire at midnight, _____.

Signed and issued this 28th day of August, 1992.

Ronald Manfredonia,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities with storm water discharges, for Indian Tribes located in the State of Maine.

Permit No. NHR00000IF

Authorization to Discharger Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.; the Act), except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, for Indian Tribes located in the State of New Hampshire, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges

associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on _____

This permit and the authorization to discharge shall expire at midnight, _____

Signed and issued this 28th day of August, 1992.

Ronald Manfredonia,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities with storm water discharges, for Indian Tribes located in the State of New Hampshire.

Authorization to Discharger Under the National Pollutant Discharge Elimination System

Permit No. MAR000001F

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, for Indian Tribes located in the State of Massachusetts, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on _____

This permit and the authorization to discharge shall expire at midnight, _____

Signed and issued this 28th day of August, 1992.

Ronald Manfredonia,

Acting Director.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities and storm water discharges, for Indian Tribes located in the State of Massachusetts.

Authorization to Discharger Under the National Pollutant Discharge Elimination System

Permit No. MER000000

In compliance with the provisions of the Clean Water Act, as amended, (33

U.S.C. 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of Maine, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on _____

This permit and the authorization to discharge shall expire at midnight, _____

Signed and issued this 28th day of August, 1992.

Ronald Manfredonia,

Acting Director.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities located in the State of Maine.

Authorization to Discharger Under the National Pollutant Discharge Elimination System

Permit No. NHR000000

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of New Hampshire, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity, who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on _____

This permit and the authorization to discharge shall expire at midnight, _____

Signed and issued this 28th day of August, 1992.

Ronald Manfredonia,

Acting Director.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities located in the State of New Hampshire.

General Permit No. FLR000000

Region IV

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq, the "Act") except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of Florida are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on _____

This permit and the authorization to discharge shall expire at midnight, _____

Dated: August 28, 1992.

Robert F. McGhee,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through X and for any additional conditions in part XI which apply to facilities located in the State of Florida.

General Permit No. NCR00000F

Region IV

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq, the "Act") except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located on Indian land in North Carolina belonging to the Eastern Band of Cherokee Indians in the State of North Carolina are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Dated: August 28, 1992.

Robert F. McGhee,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through X and for any additional conditions in part XI which apply to facilities located within the general permit area.

General Permit No. FLR00000F

Region IV

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*, the "Act") except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located on Indian land in Florida belonging to the Seminole Tribe of Florida are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Dated: August 28, 1992.

Robert F. McGhee,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through X and for any additional conditions in part XI which apply to facilities located within the general permit area.

General Permit No. MSR00000F

Region IV

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*, the "Act") except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located on Indian land in Mississippi belonging to the Mississippi Band of Choctaw Indians are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Dated: August 28, 1992.

Robert F. McGhee,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through X and for any additional conditions in part XI which apply to facilities located within the general permit area.

General Permit No. FLR00001F

Region IV

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*, the "Act") except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located on Indian land in Florida belonging to the Miccosukee Indian Tribe of Florida are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who

fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Dated: August 28, 1992.

Robert F. McGhee,

Acting Director, Water Management Division.

This signature is for the permit conditions in parts I through X and for any additional conditions in part XI which apply to facilities located within the general permit area.

Permit No. LAR000000

Cover Page

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*, the "Act") except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of Louisiana, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 27th day of August, 1992.

Myron O. Knudson, P.E.,

Water Management Director, Region VI.

This signature is for the permit conditions in parts I through X and for any additional conditions in part XI which apply to facilities located in the State of Louisiana.

Permit No. N M R000000

Cover Page

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*; the Act), except as

provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of New Mexico, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 27th day of August, 1992.

Myron O. Knudson, P.E.,

Water Management Director, Region VI.

This signature is for the permit conditions in Parts I through X and for any additional conditions in Part XI which apply to facilities located in the State of Louisiana.

Permit No. O K R000000

Cover Page

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of Oklahoma, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 27th day of August, 1992.

Myron O. Knudson, P.E.,

Water Management Director, Region VI.

This signature is for the permit conditions in Parts I through X and for any additional conditions in Part XI which apply to facilities located in the State of Louisiana.

Permit No. T X R000000

Cover Page

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the State of Texas, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 27th day of August, 1992.

Myron O. Knudson, P.E.,

Water Management Director, Region VI.

This signature is for the permit conditions in Parts I through X and for any additional conditions in Part XI which apply to facilities located in the State of Louisiana.

Permit No. COR00000F

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. . . 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity in applicable federal facilities located in the State of Colorado, and in the following Indian Reservations:

Southern Ute Reservation; and, Ute Mountain Reservation—Includes the entire Reservation, which is located in Colorado and New Mexico.

Are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Kerrigan Clough,

Acting Regional Administrator.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located in the State of Colorado and the portion of the Ute Mountain Reservation located in the State of New Mexico.

Permit No. MTR00000F

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. . . 1251 et. seq; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, in all Indian Reservations in Montana including the following Reservations:

Blackfeet Reservation;
Crow Reservation;
Flathead Reservation;
Fort Belknap Reservation;
Fort Peck Reservation;
Northern Cheyenne Reservation; and,
Rocky Boys Reservation.

Are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Kerrigan Clough,

Acting Regional Administrator.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located in the State of Montana.

Permit No. NDR00000F

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. . . . 1251 et seq.; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity in all the Indian Reservations located in the State of North Dakota including the following (with the exception of the portion of the Lake Traverse Reservation, also known as the Sisseton Reservation, located in North Dakota)

Fort Totten Reservation—Also known as Devils Lake Reservation;

Fort Berthold Reservation;

Standing Rock Reservation—Includes the entire Reservation, which is located in both North Dakota and South Dakota; and,

Turtle Mountain Reservation.

Are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Kerrigan Clough,

Acting Regional Administrator.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located in the State of North Dakota and the portion of the Standing Rock Reservation located in the State of South Dakota.

Permit No. SDR000000

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the entire State of South Dakota including the Indian reservations noted below (with the exception of the portion of the Standing Rock Reservation located in South Dakota), and the portion of the Lake Traverse Reservation located in North Dakota

Cheyenne River Reservation;

Crow Creek Reservation;

Flandreau Reservation;

Lake Traverse Reservation—Also known as the Sisseton Reservation.

Includes the entire Reservation, which is located in North Dakota and South Dakota;

Lower Brule Reservation;

Pine Ridge Reservation—Includes only the portion of the Reservation located in South Dakota;

Rosebud Reservation; and,

Yankton Reservation.

are authorized to discharge in

accordance with the conditions and requirements set forth herein. Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Kerrigan Clough,

Acting Regional Administrator.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities located in the State of South Dakota and the portion of the Lake Traverse Reservation located in the State of North Dakota.

Permit No. UTR00000F

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33

U.S.C. 1251 et seq.; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the following Indian Reservations in Utah (except for the portions of the Navajo Reservation and Goshute Reservation located in Utah) Northern Shoshoni Reservation; Paiute Reservations—several very small reservations located in the southwest quarter of Utah; Skull Valley Reservation; and, Uintah & Ouray Reservation. are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Kerrigan Clough,

Acting Regional Administrator.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities located in the State of Utah.

Permit No. WYR00000F

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity, located in the Wind River Indian Reservation in the State of Wyoming, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by these permits must submit a Notice of Intent in accordance with part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in

accordance with part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Kerrigan Clough,

Acting Regional Administrator.

This signature is for the permit conditions in parts I through IX and for any additional conditions in part XI which apply to facilities located in the State of Wyoming.

Storm Water General Permit for Industrial Activity (Excluding Construction Activities)

Permit No. CAR0000IF

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended (U.S.C. . . 1251 et. seq.; the Act), except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity (excluding construction activity), located on

Indian Lands in the State of California are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Daniel W. McGovern,

Regional Administrator, Region 9.

This signature is for the permit conditions in parts I through IX and for any additional conditions in Part XI which apply to facilities located on Indian lands in California.

Storm Water General Permit for Industrial Activity (Excluding Construction Activities)

Permit No. AZR000000

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (U.S.C. . . 1251 et. seq.; the Act), except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity (excluding construction activity), located in the

State of Arizona (Excluding Indian Lands)

are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Daniel W. McGovern,

Regional Administrator, Region 9.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located in the State of Arizona (excluding Indian lands).

Storm Water General Permit for Industrial Activity (Excluding Construction Activities)

Permit No. JAR000000

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended (U.S.C. . . 1251 et. seq.; the Act), except as provided in part I.B.3 of this permit, operators of storm water discharges associated with industrial activity (excluding construction activity), located on

Johnston Atoll

are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Daniel W. McGovern,

Regional Administrator, Region 9.

This signature is for the permit conditions in parts I through IX and for any additional conditions in Part XI which apply to facilities located on Johnston Atoll.

Storm Water General Permit for Industrial Activity (Excluding Construction Activities)

Permit No. MWR000000

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (U.S.C. . . 1251 et seq.; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity (excluding construction activity), located on

Midway Island or Wake Island are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Daniel W. McGovern,

Regional Administrator, Region 9.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located on Midway Island or Wake Island.

Storm Water General Permit for Industrial Activity (Excluding Construction Activities)

Permit No. AZR0000IF

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (U.S.C. . . 1251 et seq.; the Act), except as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity (excluding construction activity), located on

Indian Lands in the State of Arizona, Including Navajo Territory in the States of New Mexico and Utah

are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Daniel W. McGovern,

Regional Administrator, Region 9.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located on the Indian lands specified above.

Storm Water General Permit for Industrial Activity (Excluding Construction Activities)

Permit No. NVR0000IF

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (U.S.C. . . 1251 et seq.; the Act), except

as provided in Part I.B.3 of this permit, operators of storm water discharges associated with industrial activity (excluding construction activity), located on

Indian Lands in the State of Nevada,

Including Goshute Territory the State of Utah

are authorized to discharge in accordance with the conditions and requirements set forth herein.

Operators of storm water discharges associated with industrial activity within the general permit area who intend to be authorized by this permit must submit a Notice of Intent in accordance with Part II of this permit. Operators of storm water discharges associated with industrial activity who fail to submit a Notice of Intent in accordance with Part II of this permit are not authorized under this general permit.

This permit shall become effective on September 9, 1992.

This permit and the authorization to discharge shall expire at midnight, September 9, 1997.

Signed and issued this 28th day of August, 1992.

Daniel W. McGovern,

Regional Administrator, Region 9.

This signature is for the permit conditions in Parts I through IX and for any additional conditions in Part XI which apply to facilities located on the Indian lands specified above.

General Permit No.: AK-R-00-0000

Region 10

Authorization To Discharge Under the National Pollutant Discharge Elimination System for Storm Water Discharges Associated With Industrial Activity

In compliance with the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act".

Owners and operators of facilities engaged in discharging storm water associated with industrial activities, except facilities identified in Part I hereof and except facilities located on Indian lands within the State of Alaska, are authorized to discharge to waters of the State of Alaska and waters of the United States adjacent to State waters, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

A copy of this general permit must be kept at the facility where the discharges occur.

This permit shall become effective

This permit and the authorization to discharge shall expire at midnight, on

Signed this 27th day of August 1992.

Harold E. Geren,

Acting Director, Water Division, Region 10, U.S. Environmental Protection Agency.

This signature is for the permit conditions in Parts I through X and for any additional conditions in Part XI which apply to facilities in the State of Alaska.

General Permit No.: ID-R-00-000F

Region 10

Authorization To Discharge Under the National Pollutant Discharge Elimination System for Storm Water Discharges Associated With Industrial Activity

In compliance with the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act".

Owners and operators of facilities located on Indian lands in the State of Idaho that are engaged in discharging storm water associated with industrial activities, except facilities identified in Part I hereof, are authorized to discharge to waters of the United States, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

A copy of this general permit must be kept at the facility where the discharges occur.

This permit shall become effective

This permit and the authorization to discharge shall expire at midnight, on

Signed this 27th day of August 1992.

Harold E. Geren,

Acting Director, Water Division, Region 10, U.S. Environmental Protection Agency.

This signature is for the permit conditions in Parts I through X and for any additional conditions in Part XI which apply to facilities in the State of Idaho.

General Permit No.: AK-R-00-000F

Region 10

Authorization To Discharge Under the National Pollutant Discharge Elimination System for Storm Water Discharges Associated With Industrial Activity

In compliance with the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act".

Owners and operators of facilities located on Indian lands in the State of Alaska that are engaged in discharging storm water associated with industrial activities, except facilities identified in Part I hereof, are authorized to discharge to waters of the United States, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

A copy of this general permit must be kept at the facility where the discharges occur.

This permit shall become effective
This permit and the authorization to
discharge shall expire at midnight, on

Signed this 27th day of August 1992.

Harold E. Geren,

*Acting Director, Water Division, Region 10,
U.S. Environmental Protection Agency.*

This signature is for the permit conditions
in Parts I through X and for any additional
conditions in Part XI which apply to facilities
located on Indian lands in the State of
Alaska.

General Permit No.: WA-R-00-001F

Region 10

**Authorization To Discharge Under the
National Pollutant Discharge Elimination
System for Storm Water Discharges
Associated With Industrial Activity**

In compliance with the provisions of
the Clean Water Act, 33 U.S.C. § 1251 *et
seq.*, as amended by the Water Quality
Act of 1987, P.L. 100-4, the "Act".

Owners and operators of facilities
located on Indian lands in the State of
Washington that are engaged in
discharging storm water associated with
industrial activities, except facilities
identified in Part I hereof, are authorized
to discharge to waters of the United
States, in accordance with effluent
limitations, monitoring requirements,
and other conditions set forth herein.

A copy of this general permit must be
kept at the facility where the discharges
occur.

This permit shall become effective

This permit and the authorization to
discharge shall expire at midnight, on

Signed this 27th day of August 1992.

Harold E. Geren,

*Acting Director, Water Division, Region 10,
U.S. Environmental Protection Agency.*

This signature is for the permit conditions
in Parts I through X and for any additional
conditions in Part XI which apply to facilities
located on Indian lands in the State of
Washington.

General Permit No.: WA-R-00-000F

Region 10

**Authorization To Discharge Under the
National Pollutant Discharge Elimination
System for Storm Water Discharges
Associated With Industrial Activity**

In compliance with the provisions of
the Clean Water Act, 33 U.S.C. § 1251 *et
seq.*, as amended by the Water Quality
Act of 1987, P.L. 100-4, the "Act".

Owners and operators of federal
facilities in the State of Washington,
that are engaged in discharging storm
water associated with industrial
activities, except facilities identified in
Part I hereof and except facilities
located on Indian lands within the State
of Washington, are authorized to

discharge to waters of the State of
Washington and waters of the United
States adjacent to State waters, in
accordance with effluent limitations,
monitoring requirements, and other
conditions set forth herein.

A copy of this general permit must be
kept at the facility where the discharges
occur.

This permit shall become effective
This permit and the authorization to
discharge shall expire at midnight, on

Signed this 27th day of August 1992.

Harold E. Geren,

*Acting Director, Water Division, Region 10,
U.S. Environmental Protection Agency.*

This signature is for the permit conditions
in Parts I through X and for any additional
conditions in Part XI which apply to federal
facilities in the State of Washington.

General Permit No.: ID-R-00-0000

Region 10

**Authorization To Discharge Under the
National Pollutant Discharge Elimination
System for Storm Water Discharges
Associated With Industrial Activity**

In compliance with the provisions of
the Clean Water Act, 33 U.S.C. § 1251 *et
seq.*, as amended by the Water Quality
Act of 1987, P.L. 100-4, the "Act".

Owners and operators of facilities
engaged in discharging storm water
associated with industrial activities,
except facilities identified in Part I
hereof and except facilities located on
Indian lands within the State of Idaho,
are authorized to discharge to waters of
the State of Idaho and waters of the
United States adjacent to State waters,
in accordance with effluent limitations,
monitoring requirements, and other
conditions set forth herein.

A copy of this general permit must be
kept at the facility where the discharges
occur.

This permit shall become effective
This permit and the authorization to
discharge shall expire at midnight, on

Signed this 27th day of August 1992.

Harold E. Geren,

*Acting Director, Water Division, Region 10,
U.S. Environmental Protection Agency.*

This signature is for the permit conditions
in Parts I through X and for any additional
conditions in Part XI which apply to facilities
in the State of Idaho.

**NPDES General Permit for Storm Water
Discharges Associated With Industrial
Activity**

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PREFACE

The CWA provides that storm water discharges associated with industrial activity from a point source (including discharges through a municipal separate storm sewer system) to waters of the United States are unlawful, unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The terms "storm water discharge associated with industrial activity", "point source" and "waters of the United States" are critical to determining whether a facility is subject to this requirement. Complete definitions of these terms are found in the definition section (Part X) of this permit. In order to determine the applicability of the requirement to a particular facility, the facility operator must examine its activities in relationship to the eleven categories of industrial facilities described in the definition of "storm water discharge associated with industrial activity".

Category (xi) of the definition, which address facilities with activities classified under Standard Industrial Classifications (SIC) codes 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221–25, (and which are not otherwise included within categories (i)–(x)), differs from other categories listed in that it only addresses storm water discharges where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water.¹

The United States Environmental Protection Agency (EPA) has established the Storm Water Hotline at (703) 821-4823 to assist the Regional Offices in distributing notice of intent forms and storm water pollution prevention plan guidance, and to provide information pertaining to the NPDES storm water regulations.

¹ On June 4, 1992, the United States Court of Appeals for the Ninth Circuit remanded the exclusion for manufacturing facilities in category (xi) which do not have materials or activities exposed to storm water to the EPA for further rulemaking. (*Natural Resources Defense Council v. EPA*, Nos. 90-70671 and 91-70200).

Part I. Coverage Under This Permit

A. Permit Area

The permit covers all areas of: Region I—for the States of Maine and New Hampshire; for Indian lands located in Massachusetts, New Hampshire, and Maine.

Region IV—for the State of Florida; and for Indian lands located in Florida, Mississippi, and North Carolina.

Region VI—for the States of Louisiana, New Mexico, Oklahoma, and Texas; and for Indian lands located in Louisiana, New Mexico (except Navajo lands and Ute Mountain Reservation lands), Oklahoma, and Texas.

Region VIII—for the State of South Dakota; for Indian lands located in Colorado, Montana, North Dakota, South Dakota, Utah (except Goshute Reservation and Navajo Reservation lands), and Wyoming; for Federal facilities in Colorado; and for the Ute Mountain Reservation in Colorado, and New Mexico.

Region IX—for the State of Arizona; for the Territories of Johnston Atoll, and Midway and Wake Island; and for Indian lands located in California, and Nevada; and for the Goshute Reservation in Utah and Nevada, the Navajo Reservation in Utah, New Mexico, and Arizona, the Duck Valley Reservation in Nevada and Idaho.

Region X—for the State of Alaska, and Idaho; for Indian lands located in Alaska, Idaho (except Duck Valley Reservation lands), and Washington; and for Federal facilities in Washington.

B. Eligibility

1. This permit may cover all new and existing point source discharges of storm water associated with industrial activity to waters of the United States, except for storm water discharges identified under paragraph I.B.3.

2. This permit may authorize storm water discharges associated with industrial activity that are mixed with storm water discharges associated with industrial activity from construction activities provided that the storm water discharge from the construction activity is in compliance with the terms, including applicable notice of intent (NOI) or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

3. *Limitations on Coverage.* The following storm water discharges associated with industrial activity are not authorized by this permit:

a. storm water discharges associated with industrial activity that are mixed with sources of non-storm water other

than non-storm water discharges that are:

(i) in compliance with a different NPDES permit; or

(ii) identified by and in compliance with Part III.A.2 (authorized non-storm water discharges) of this permit.

b. storm water discharges associated with industrial activity which are subject to an existing effluent limitation guideline addressing storm water (or a combination of storm water and process water)²;

c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit; are located at a facility that where an NPDES permit has been terminated or denied; or which are issued in a permit in accordance with paragraph VII.M (requirements for individual or alternative general permits) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges;

d. storm water discharges associated with industrial activity from construction sites, except storm water discharges from portions of a construction site that can be classified as an industrial activity under 40 CFR 122.26(b)(14) (i) through (ix) or (xi) (including storm water discharges from mobile asphalt plant, and mobile concrete plants);

e. storm water discharges associated with industrial activity that the Director (EPA) has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard;

f. storm water discharges associated with industrial activity that may adversely affect a listed or proposed to be listed endangered or threatened species or its critical habitat; and

g. storm water discharges associated with industrial activity from inactive mining, inactive landfills, or inactive oil and gas operations occurring on Federal lands where an operator cannot be identified.

² For the purpose of this permit, the following effluent limitation guidelines address storm water (or a combination of storm water and process water): cement manufacturing (40 CFR 411); feedlots (40 CFR 412); fertilizer manufacturing (40 CFR 418); petroleum refining (40 CFR 419); phosphate manufacturing (40 CFR 422); steam electric (40 CFR 423); coal mining (40 CFR 434); mineral mining and processing (40 CFR 436); ore mining and dressing (40 CFR 440); and asphalt emulsion (40 CFR 443 Subpart A). This permit may authorize storm water discharges associated with industrial activity which are not subject to an effluent limitation guideline even where a different storm water discharge at the facility is subject to an effluent limitation guideline.

4. Storm water discharges associated with industrial activity which are authorized by this permit may be combined with other sources of storm water which are not classified as associated with industrial activity pursuant to 40 CFR 122.26(b)(14), so long as the discharger is in compliance with this permit.

c. Authorization

1. Dischargers of storm water associated with industrial activity must submit a Notice of Intent (NOI) in accordance with the requirements of Part II of this permit, using a NOI form provided by the Director (or photocopy thereof), to be authorized to discharge under this general permit³.

2. Unless notified by the Director to the contrary, owners or operators who submit such notification are authorized to discharge storm water associated with industrial activity under the terms and conditions of this permit 2 days after the date that the NOI is postmarked.

3. The Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. Notice of Intent Requirements

A. Deadlines for Notification

1. Except as provided in paragraphs II.A.4 (rejected or denied municipal group applicants), II.A.5 (new operator) and II.A.6 (late NOIs), individuals who intend to obtain coverage for an existing storm water discharge associated with industrial activity under this general permit shall submit a Notice of Intent (NOI) in accordance with the requirements of this part on or before October 1, 1992;

2. Except as provided in paragraphs II.A.3 (oil and gas operations), II.A.4 (rejected or denied municipal group applicants), II.A.5 (new operator), and II.A.6 (late NOI) operators of facilities which begin industrial activity after October 1, 1992 shall submit a NOI in accordance with the requirements of this part at least 2 days prior to the commencement of the industrial activity at the facility;

3. Operators of oil and gas exploration, production, processing, or treatment operations or transmission facilities, that are not required to submit a permit application as of October 1, 1992 in accordance with 40 CFR 122.26(c)(1)(iii), but that after October 1, 1992 have a discharge of a reportable

quantity of oil or a hazardous substance for which notification is required pursuant to either 40 CFR 110.6, 40 CFR 117.21 or 40 CFR 302.6, must submit a NOI in accordance with the requirements of Part II.C of this permit within 14 calendar days of the first knowledge of such release.

4. Storm water discharges associated with industrial activity from a facility that is owned or operated by a municipality that has participated in a timely Part 1 group application and where either the group application is rejected or the facility is denied participation in the group application by EPA, and that are seeking coverage under this general permit shall submit a NOI in accordance with the requirements of this part on or before the 180th day following the date on which the group is rejected or the denial is made, or October 1, 1992, whichever is later.

5. Where the operator of a facility with a storm water discharge associated with industrial activity which is covered by this permit changes, the new operator of the facility must submit an NOI in accordance with the requirements of this part at least 2 days prior to the change.

6. An operator of a storm water discharge associated with industrial activity is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Parts II.A.1, 2, 3, or 4 (above) of this permit. In such instances, EPA may bring appropriate enforcement actions.

B. *Contents of Notice of Intent.* The Notice of Intent shall be signed in accordance with Part VII.G (signatory requirements) of this permit and shall include the following information:

1. The street address of the facility for which the notification is submitted. Where a street address for the site is not available, the location of the approximate center of the facility must be described in terms of the latitude and longitude to the nearest 15 seconds, or the section, township and range to the nearest quarter section;

2. Up to four 4-digit Standard Industrial Classification (SIC) codes that best represent the principal products or for hazardous waste treatment, storage or disposal facilities, land disposal facilities that receive or have received any industrial waste, steam electric power generating facilities, or treatment works treating domestic sewage, a narrative identification of those activities;

3. The operator's name, address, telephone number, and status as

Federal, State, private, public or other entity;

4. The permit number(s) of additional NPDES permit(s) for any discharge(s) (including non-storm water discharges) from the site that are currently authorized by an NPDES permit;

5. The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s) for the discharge through the municipal separate storm sewer;

6. An indication of whether the owner or operator has existing quantitative data describing the concentration of pollutants in storm water discharges (existing data should not be included as part of the NOI);

7. Where a facility has participated in Part 1 of an approved storm water group application, the number EPA assigned to the group application shall be supplied; and

8. For any facility that begins to discharge storm water associated with industrial activity after October 1, 1992, a certification that a storm water pollution prevention plan has been prepared for the facility in accordance with Part IV of this permit. (A copy of the plan should not be included with the NOI submission).

C. *Where to Submit.* Facilities which discharge storm water associated with industrial activity must use a NOI form provided by the Director (or photocopy thereof). The form in the Federal Register notice in which this permit was published may be photocopied and used. Forms are also available by calling (703) 821-4823. NOIs must be signed in accordance with Part VII.G (signatory requirements) of this permit. NOIs are to be submitted to the Director of the NPDES program in care of the following address: Storm Water Notice of Intent, P.O. Box 1215, Newington, VA 22122.

D. *Additional Notification.* Facilities which discharge storm water associated with industrial activity through large or medium municipal separate storm sewer systems (systems located in an incorporated city with a population of 100,000 or more, or in a county identified as having a large or medium system (see definition in Part X of this permit and Appendix E of this notice)) shall, in addition to filing copies of the Notice of Intent in accordance with paragraph II.D, also submit signed copies of the Notice of Intent to the operator of the municipal separate storm sewer through which they discharge in accordance with the deadlines in Part II.A (deadlines for notification) of this permit.

³ A copy of the approved NOI form is provided in Appendix C of this notice.

E. *Renotification*. Upon issuance of a new general permit, the permittee is required to notify the Director of their intent to be covered by the new general permit.

Part III. Special Conditions

A. Prohibition on Non-Storm Water Discharges

1. Except as provided in paragraph III.A.2 (below), all discharges covered by this permit shall be composed entirely of storm water.

2. a. Except as provided in paragraph III.A.2.b (below), discharges of material other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.

b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is in compliance with paragraph IV.D.3.g.(2) (measures and controls for non-storm water discharges): discharges from fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Releases in Excess of Reportable Quantities

1. The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not relieve the permittee of the reporting requirements of 40 CFR part 117 and 40 CFR part 302. Except as provided in paragraph III.B.2 (multiple anticipated discharges) of this permit, where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR 117 or 40 CFR 302, occurs during a 24 hour period.

a. The discharger is required to notify the National Response Center (NRC) (800-424-8802; in the Washington, DC metropolitan area 202-426-2675) in accordance with the requirements of 40

CFR 117 and 40 CFR 302 as soon as he or she has knowledge of the discharge;

b. The storm water pollution prevention plan required under Part IV (storm water pollution prevention plans) of this permit must be modified within 14 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed by the permittee to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate; and

c. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken in accordance with paragraph III.B.1.b (above) of this permit to the appropriate EPA Regional Office at the address provided in Part VI.D.1.d (reporting: where to submit) of this permit.

2. *Multiple Anticipated Discharges*—Facilities which have more than one anticipated discharge per year containing the same hazardous substance in an amount equal to or in excess of a reportable quantity established under either 40 CFR 117 or 40 CFR 302, which occurs during a 24 hour period, where the discharge is caused by events occurring within the scope of the relevant operating system shall:

a. submit notifications in accordance with Part III.B.1.b (above) of this permit for the first such release that occurs during a calendar year (or for the first year of this permit, after submittal of an NOI); and

b. shall provide in the storm water pollution prevention plan required under Part IV (storm water pollution prevention plan) a written description of the dates on which all such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the release. In addition, the plan must be reviewed to identify measures to prevent or minimize such releases and the plan must be modified where appropriate.

3. *Spills*. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

Part IV. Storm Water Pollution Prevention Plans

A storm water pollution prevention plan shall be developed for each facility covered by this permit. Storm water

pollution prevention plans shall be prepared in accordance with good engineering practices and in accordance with the factors outlined in 40 CFR 125.3(d) (2) or (3) as appropriate. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance

1. Except as provided in paragraphs IV.A.3 (oil and gas operations) 4 (facilities denied or rejected from participation in a group application) 5 (special requirements) and 6 (later dates) the plan for a storm water discharge associated with industrial activity that is existing on or before October 1, 1992:

a. shall be prepared on or before April 1, 1993 (and updated as appropriate);

b. shall provide for implementation and compliance with the terms of the plan on or before October 1, 1993;

2. a. The plan for any facility where industrial activity commences after October 1, 1992, but on or before December 31, 1992 shall be prepared, and except as provided elsewhere in this permit, shall provide for compliance with the terms of the plan and this permit on or before the date 60 calendar days after the commencement of industrial activity (and updated as appropriate);

b. The plan for any facility where industrial activity commences on or after January 1, 1993 shall be prepared, and except as provided elsewhere in this permit, shall provide for compliance with the terms of the plan and this permit, on or before the date of submission of a NOI to be covered under this permit (and updated as appropriate);

3. The plan for storm water discharges associated with industrial activity from an oil and gas exploration, production, processing, or treatment operation or transmission facility that is not required to submit a permit application on or before October 1, 1992 in accordance with 40 CFR 122.26(c)(1)(iii), but after October 1, 1992 has a discharge of a

reportable quantity of oil or a hazardous substance for which notification is required pursuant to either 40 CFR 110.6, 40 CFR 117.21 or 40 CFR 302.6, shall be prepared and except as provided elsewhere in this permit, shall provide for compliance with the terms of the plan and this permit on or before the date 60 calendar days after the first knowledge of such release (and updated as appropriate);

4. The plan for storm water discharges associated with industrial activity from a facility that is owned or operated by a municipality that has participated in a timely group application where either the group application is rejected or the facility is denied participation in the group application by EPA,

a. shall be prepared on or before the 365th day following the date on which the group is rejected or the denial is made, (and updated as appropriate);

b. except as provided elsewhere in this permit, shall provide for compliance with the terms of the plan and this permit on or before the 545th day following the date on which the group is rejected or the denial is made; and

5. Portions of the plan addressing additional requirements for storm water discharges from facilities subject to Parts IV.D.7 (EPCRA Section 313 and IV.D.8 (salt storage) shall provide for compliance with the terms of the requirements identified in Parts IV.D.7 and IV.D.8 as expeditiously as practicable, but except as provided below, not later than either October 1, 1995. Facilities which are not required to report under EPCRA Section 313 prior to July 1, 1992, shall provide for compliance with the terms of the requirements identified in Parts IV.D.7 and IV.D.8 as expeditiously as practicable, but not later than three years after the date on which the facility is first required to report under EPCRA Section 313. However, plans for facilities subject to the additional requirements of Part IV.D.7 and IV.D.8 shall provide for compliance with the other terms and conditions of this permit in accordance with the appropriate dates provided in Part IV.1, 2, 3, or 5 of this permit.

6. Upon a showing of good cause, the Director may establish a later date in writing for preparing and compliance with a plan for a storm water discharge associated with industrial activity that submits a NOI in accordance with Part II.A.2 (deadlines for notification—new dischargers) of this permit (and updated as appropriate).

B. Signature and Plan Review

1. The plan shall be signed in accordance with Part VII.G (signature requirements), and be retained on-site at

the facility which generates the storm water discharge in accordance with Part V.I.E (retention of records) of this permit.

2. The permittee shall make plans available upon request to the Director, or authorized representative, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. The Director, or authorized representative, may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan requires modifications in order to meet the minimum requirements of this Part. Within 30 days of such notification from the Director, (or as otherwise provided by the Director), or authorized representative, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

C. Keeping Plans Current

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 (description of potential pollutant sources) of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by EPA in the same manner as Part IV.B (above).

D. Contents of Plan

The plan shall include, at a minimum, the following items:

1. *Pollution Prevention Team.* Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

2. *Description of Potential Pollutant Sources.* Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during any dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

a. *Drainage.*

(1) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IV.D.2.c (spills and leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

b. *Inventory of Exposed Materials.* An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff

between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c. *Spills and Leaks.* A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

d. *Sampling Data.* A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

e. *Risk Identification and Summary of Potential Pollutant Sources.* A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concern shall be identified.

3. *Measures and Controls.* Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

a. *Good Housekeeping.*—Good housekeeping requires the maintenance of areas which may contribute pollutants to storm waters discharges in a clean, orderly manner.

b. *Preventive Maintenance.* A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and

ensuring appropriate maintenance of such equipment and systems.

c. *Spill Prevention and Response Procedures.* Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

d. *Inspections.* In addition to or as part of the comprehensive site evaluation required under Part IV.4 of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspection shall be maintained.

e. *Employee Training.* Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

f. *Recordkeeping and Internal Reporting Procedures.* A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

g. *Non-Storm Water Discharges.*

(1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method

used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part VII.G of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant source of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director in accordance with Part VI.A (failure to certify) of this permit.

(2) Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2 (authorized non-storm water discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

h. *Sediment and Erosion Control.* The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

i. *Management of Runoff.* The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges, associated with industrial activity (see Parts IV.D.2. (description of potential pollutant sources) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators),

snow management activities, infiltration devices, and wet detention/retention devices.

4. *Comprehensive Site Compliance Evaluation.* Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d (below), in no case less than once a year. Such evaluations shall provide:

a. Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Part IV.D.2 (description of potential pollutant sources) of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph IV.D.3 (measures and controls) of this permit shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.

c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.b (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least one year after coverage under this permit terminates. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part VII.G (signatory requirements) of this permit.

d. Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in three years.

5. *Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more.*

a. In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

b. Permittees which discharge storm water associated with industrial activity through a municipal separate storm sewer system serving a population of 100,000 or more shall make plans available to the municipal operator of the system upon request.

6. *Consistency with other plans.* Storm water pollution prevention plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.

7. *Additional requirements for storm water discharges associated with industrial activity from facilities subject to EPCRA Section 313 requirements.* In addition to the requirements of Parts IV.D.1 through 4 of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under EPCRA Section 313 for chemicals which are classified as 'Section 313 water priority chemicals' in accordance with the definition in Part X of this permit, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:

a. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

(1) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or

(2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind.

b. In addition to the minimum standards listed under Part IV.D.7.a (above) of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:

(1) *Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for section 313 water priority chemicals.*

(a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

(2) *Material storage areas for Section 313 water priority chemicals other than liquids.* Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

(3) *Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals.* Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the

placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

(4) Areas where Section 313 water priority chemicals are transferred, processed or otherwise handled.

Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

(5) Discharges from areas covered by paragraphs (1), (2), (3) or (4).

(a) Drainage from areas covered by paragraphs (1), (2), (3) or (4) of this part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

(b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

(c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.

(d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(6) Facility site runoff other than from areas covered by (1), (2), (3) or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3) or (4)), from which runoff which may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals

could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

(7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to waters of the United States, action to stop the leak or otherwise prevent the significant release of section 313 water priority chemicals to waters of the United States shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

(8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(9) Training. Facility employees and contractor personnel that work in areas where Section 313 water priority chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to

minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

(10) Engineering certification. The storm water pollution prevention plan for a facility subject to EPRCA Section 313 requirements for chemicals which are classified as 'section 313 water priority chemicals' shall be reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the plan every three years thereafter or as soon as practicable after significant modification are made to the facility. By means of these certifications the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water pollution prevention plan has been prepared in accordance with good engineering practices. Such certifications shall in no way relieve the owner or operator of a facility covered by the plan of their duty to prepare and fully implement such plan.

8. Additional Requirements for Salt Storage

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than October 1, 1995. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the United States.

Part V. Numeric Effluent Limitations

A. Coal Pile Runoff

Any discharge composed of coal pile runoff shall not exceed a maximum concentration for any time of 50 mg/1 total suspended solids. Coal pile runoff

shall not be diluted with storm water or other flows in order to meet this limitation. The pH of such discharges shall be within the range of 6.0-9.0. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the 50 mg/1 limitation for total suspended solids. Failure to demonstrate compliance with these limitations as expeditiously as practicable, but in no case later than October 1, 1995, will constitute a violation of this permit.

Part VI. Monitoring and Reporting Requirements

A. Failure to Certify

Any facility that is unable to provide the certification required under paragraph IV.D.3.g.(1) (testing for non-storm water discharges), must notify the Director by October 1, 1993 or, for facilities which begin to discharge storm water associated with industrial activity after October 1, 1992, 180 days after submitting a NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated or dischargers must submit appropriate NPDES permit application forms.

B. Monitoring Requirements

1. Limitations on Monitoring Requirements.

a. Except as required by paragraph b., only those facilities with activities specifically identified in Parts VI.B.2 (semi-annual monitoring requirements) and VI.B.3 (annual monitoring requirements) of this permit are required to conduct sampling of their storm water discharges associated with industrial activity.

b. The Director can provide written notice to any facility otherwise exempt from the sampling requirements of Parts VI.B.2 (semi-annual monitoring requirements) or VI.B.3 (annual monitoring requirements), that it shall conduct the annual discharge sampling required by Part VI.B.3.d (additional facilities), or specify an alternative

monitoring frequency or specify additional parameters to be analyzed.

2. *Semi-Annual Monitoring Requirements.* During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in Parts VI.B.2.a through f must monitor those storm water discharges identified below at least semi-annually (2 times per year) except as provided in VI.B.5 (sampling waiver), VI.B.6 (representative discharge), and VI.C.1 (toxicity testing). Permittees with facilities identified in Parts VI.B.2.a through f (below) must report in accordance with Part VI.D (reporting: where to submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

a. *Section 313 of EPCRA Facilities.* In addition to any monitoring required by Parts VI.B.2.b through f. or Parts VI.B.3.a through d, facilities with storm water discharges associated with industrial activity that are subject to Section 313 of EPCRA for chemicals which are classified as 'Section 313 water priority chemicals' are required to monitor storm water that is discharged from the facility that comes into contact with any equipment, tank, container or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car loading or unloading area where a Section 313 water priority chemical is handled for: Oil and Grease (mg/L); Five Day Biochemical Oxygen Demand (BOD5) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (mg/L); Total Kjeldahl Nitrogen (TKN) (mg/L); Total Phosphorus (mg/L); pH; acute whole effluent toxicity; and any Section 313 water priority chemical for which the facility is subject to reporting requirements under section 313 of the Emergency Planning and Community Right to Know Act of 1986.

b. *Primary Metal Industries.* Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility for: oil and grease (mg/L); Chemical Oxygen Demand (COD) (mg/L); total suspended solids

(mg/L); pH; acute whole effluent toxicity; total recoverable lead (mg/L); total recoverable cadmium (mg/L); total recoverable copper (mg/L); total recoverable arsenic (mg/L); total recoverable chromium (mg/L); and any pollutant limited in an effluent guideline to which the facility is subject. Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for total recoverable cadmium, total recoverable copper, total recoverable arsenic, total recoverable chromium or acute whole effluent toxicity, but must monitor for other parameters listed above.

c. *Land Disposal Units/Incinerators/BIFs.* Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump without a stabilized final cover that has received any industrial wastes (other than wastes from a construction site); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility for: Magnesium (total recoverable) (mg/L), Magnesium (dissolved) (mg/L), Total Kjeldahl Nitrogen (TKN) (mg/L), Chemical Oxygen Demand (COD) (mg/L), Total Dissolved Solids (TDS) (mg/L), Total Organic Carbon (TOC) (mg/L), oil and grease (mg/L), pH, Total recoverable arsenic (mg/L), Total recoverable Barium (mg/L), Total recoverable Cadmium (mg/L), Total Chromium (mg/L), Total recoverable Cyanide (mg/L), Total recoverable Lead (mg/L), Total Mercury (mg/L), Total recoverable Selenium (mg/L), Total recoverable Silver (mg/L), and acute whole effluent toxicity.

d. *Wood Treatment.* Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility for: oil and grease (mg/L), pH, COD (mg/L), and TSS (mg/L). In addition, facilities that use chlorophenolic formulations shall measure pentachlorophenol (mg/L) and acute whole effluent toxicity; facilities which use creosote formulations shall measure acute whole effluent toxicity; and facilities that use chromium-arsenic formulations shall measure total recoverable arsenic (mg/L)

L), total recoverable chromium (mg/L), and total recoverable copper (mg/L).

e. *Coal Pile Runoff.* Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility for: oil and grease (mg/L), pH, TSS (mg/L), total recoverable copper (mg/1), total recoverable nickel (mg/1) and total recoverable zinc (mg/1).

f. *Battery Reclaimers.* Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); pH; total recoverable copper (mg/1); and total recoverable lead (mg/1).

3. *Annual Monitoring Requirements.* During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in Parts VI.B.3.a through d. (below) must monitor those storm water discharges identified below at least annually (1 time per year) except as provided in VI.B.5 (sampling waiver), and VI.B.6 (representative discharge). Permittees with facilities identified in parts VI.B.3.a through d. (below) are not required to submit monitoring results, unless required in writing by the Director. However, such permittees must retain monitoring results in accordance with Part VI.E (retention of records). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

a. *Airports.* At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility when deicing activities are occurring for: Oil and Grease (mg/L); Five Day Biochemical Oxygen Demand

(BOD5) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); pH; and the primary ingredient used in the deicing materials used at the site (e.g. ethylene glycol, urea, etc.).

b. *Coal-fired Steam Electric Facilities.* Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 423—which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility for: Oil and grease (mg/L), pH, TSS (mg/L), total recoverable copper (mg/L), total recoverable nickel (mg/L) and total recoverable zinc (mg/L).

c. *Animal Handling / Meat Packing.* Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility for: Five Day Biochemical Oxygen Demand (BOD5) (mg/L); oil and grease (mg/L); Total Suspended Solids (TSS) (mg/L); Total Kjeldahl Nitrogen (TKN) (mg/L); Total Phosphorus (mg/L); pH; and fecal coliform (counts per 100 mL).

d. *Additional Facilities.* Facilities with storm water discharges associated with industrial activity that:

(i) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);

(ii) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;

(iii) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;

(iv) are from oil handling sites at oil fired steam electric power generating facilities;

(v) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411—which are not eligible for coverage under this permit);

(vi) are from ready-mixed concrete facilities; or

(vii) are from ship building and repairing facilities;

are required to monitor such storm water discharged from the facility for: Oil and Grease (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); pH; and any pollutant limited in an effluent guideline to which the facility is subject.

4. *Sample Type.* For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for both a grab sample and a composite sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hours of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable. The composite sample shall either be flow-weighted or time-weighted. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. Grab samples only must be collected and analyzed for the determination of pH, cyanide, whole effluent toxicity, fecal coliform, and oil and grease.

5. *Sampling Waiver.* When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why

samples could not be collected, including available documentation of the event. Adverse weather conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.). Dischargers are precluded from exercising this waiver more than once during a two year period.

6. *Representative Discharge.* When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. Permittees required to submit monitoring information under Parts VI.D.1.a, b or c of this permit shall include the description of the location of the outfalls, explanation of why outfalls are expected to discharge substantially identical effluents, and estimate of the size of the drainage area and runoff coefficient with the Discharge Monitoring Report.

7. *Alternative Certification.* A discharger is not subject to the monitoring requirements of Parts VI.B.2 or 3 of this permit provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with Part VII.G (signatory requirements), that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity, or, in the case of airports, deicing activities, that are located in areas of the facility that are within the drainage

area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the storm water pollution prevention plan, and submitted to EPA in accordance with Part VI.D of this permit.

8. *Alternative to WET Parameter.* A discharger that is subject to the monitoring requirements of Parts VI.B.2.a through d may, in lieu of monitoring for acute whole effluent toxicity, monitor for pollutants identified in Tables II and III of Appendix D of 40 CFR 122 (see Addendum A of this permit) that the discharger knows or has reason to believe are present at the facility site. Such determinations are to be based on reasonable best efforts to identify significant quantities of materials or chemicals present at the facility. Dischargers must also monitor for any additional parameter identified in Parts VI.B.2.a through d.

C. *Toxicity Testing.* Permittees that are required to monitor for acute whole effluent toxicity shall initiate the series of tests described below within 180 days after the issuance of this permit or within 90 days after the commencement of a new discharge.

1. *Test Procedures.*

a. The permittee shall conduct acute 24 hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4-90-027 Rev. 9/91, Section 6.1).² Freshwater species must be used for discharges to freshwater water bodies. Due to the non-saline nature of rainwater, freshwater test species should also be used for discharges to estuarine, marine or other naturally saline waterbodies.

b. All test organisms, procedures and quality assurance criteria used shall be in accordance with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA/600/4-90-027 (Rev. September 1991). EPA has proposed to establish regulations regarding these test methods (December 4, 1989, 53 FR 50216).

c. Tests shall be conducted semiannually (twice per year) on a grab sample of the discharge. Tests shall be conducted using 100 effluent (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report submitted to EPA with the Discharge

Monitoring Reports (DMR's). On the DMR, the permittee shall report "O" if there is no statistical difference between the control mortality and the effluent mortality for each dilution. If there is statistical difference (exhibits toxicity), the permittee shall report "1" on the DMR.

2. If acute whole effluent toxicity (statistically significant difference between the 100% dilution and the control) is detected on or after October 1, 1995, in storm water discharges, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the source(s) of toxicity and to reduce the toxicity of their storm water discharges. A summary of the review and the resulting modifications shall be provided in the plan.

D. *Reporting: Where to Submit.*

1. a. Permittees which are required to conduct sampling pursuant to Parts VI.B.2.(a) (EPCRA Section 313), and (d) (Wood Treatment facilities), shall monitor samples collected during the sampling periods running from January to June and during the sampling period from July to December. Such permittees shall submit monitoring results obtained during the reporting period running from January to December on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following January. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than twelve months of information.

b. Permittees which are required to conduct sampling pursuant to Parts VI.B.2.(b) (Primary Metal facilities), (e) (Coal Pile Runoff), and (f) (Battery Reclaimers) shall monitor samples collected during the sampling period running from March to August and during the sampling period running from September to February. Such permittees shall submit monitoring results obtained during the reporting period running from April to March on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of the following April. A separate Discharge Monitoring Report Form is required for each event sampling period. The first report may include less than twelve months of information.

c. Permittees which are required to conduct sampling pursuant to Parts VI.B.2.(c) (Land disposal facilities), shall monitor samples collected during the sampling period running from October to March and during the sampling period running from April to September. Such permittees shall submit monitoring

results obtained during the reporting period running from October to September on Discharge Monitoring Report Form(s) postmarked no later than the 28th day of October. A separate Discharge Monitoring Report Form is required for each sampling period. The first report may include less than twelve months of information.

d. Signed copies of discharge monitoring reports required under Parts VI.D.1.a, VI.D.1.b, and VI.D.1.c, individual permit applications and all other reports required herein, shall be submitted to the Director of the NPDES program at the address of the appropriate Regional Office:

1. *CT, MA, ME, NH, RI, VT*

United States EPA, Region I, Water Management Division, (WCP-2109), Storm Water Staff, John F. Kennedy Federal Building, Room 2209, Boston, MA 02203.

2. *NJ, NY, PR, VI*

United States EPA, Region II, Water Management Division, (2WM-WPC), Storm Water Staff, 26 Federal Plaza, New York, NY 10278.

3. *DE, DC, MD, PA, VA, WV*

United States EPA, Region III, Water Management Division, (3WM55), Storm Water Staff, 841 Chestnut Building, Philadelphia, PA 19107.

4. *AL, FL, GA, KY, MS, NC, SC, TN*

United States EPA, Region IV, Water Management Division, (FPB-3), Storm Water Staff, 345 Courtland Street, NE, Atlanta, GA 30365.

5. *IL, IN, MI, MN, OH, WI*

United States EPA, Region V, Water Quality Branch, (5 WQP), Storm Water Staff, 77 West Jackson Boulevard, Chicago, IL 60604.

6. *AR, LA, NM (except see Region IX for Navajo lands, and see Region VIII for Ute Mountain Reservation lands), OK, TX*

United States EPA, Region VI, Water Management Division, (6W-EA), Storm Water Staff, First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, 12th Floor, Suite 1200, Dallas, TX 75202.

7. *IA, KS, MO, NE*

United States EPA, Region VII, Water Management Division, Compliance Branch, Storm Water Staff, 726 Minnesota Avenue, Kansas City, KS 66101.

8. *CO, MT, ND, SD, WY, UT (except see Region IX for Goshute Reservation and Navajo Reservation lands)*

United States EPA, Region VIII, Water Management Division, NPDES Branch (8WM-C), Storm Water Staff, 999 18th Street, Denver, CO 80202-2466.

Note.—For Montana Indian Lands, please use the following address:

United States EPA, Region VIII, Montana Operations Office, Federal Office Building, Drawer 10096, 301 South Park, Helena, MT 59620-0026.

9. *AZ, CA, HI, NV, Guam, American Samoa, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in NV and ID*

United States EPA, Region IX, Water Management Division, (W-5-1), Storm Water Staff, 75 Hawthorne Street, San Francisco, CA 94105.

10. *AK, ID (except see Region IX for Duck Valley Reservation lands), OR, WA*

United States EPA, Region X, Water Management Division, (WD-134), Storm Water Staff, 1200 Sixth Street, Seattle, WA 98101(i).

e. Permittees with facilities identified in Parts VI.B.3 (annual monitoring) are not required to submit monitoring results, unless required in writing by the Director.

2. *Additional Notification.*

In addition to filing copies of discharge monitoring reports in accordance with Part VI.D.1 (reporting: where to submit), facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph VI.D.1 (reporting: where to submit). Facilities not required to report monitoring data under Part VI.B.3 (annual monitoring requirements), and facilities that are not otherwise required to monitor their discharges, need not comply with this provision.

E. *Retention of Records.*

1. The permittee shall retain the pollution prevention plan developed in accordance with Part IV (storm water pollution prevention plans) of this permit until at least one year after coverage under this permit terminates. The permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and

records of all data used to complete the Notice of Intent to be covered by this permit, until at least one year after coverage under this permit terminates. This period may be explicitly modified by alternative provisions of this permit (see paragraph VI.E.2 (below) of this permit) or extended by request of the Director at any time.

2. For discharges subject to sampling requirements pursuant to Part VI.B (monitoring requirements), in addition to the requirements of paragraph VI.E.1 (above), permittees are required to retain for a six year period from the date of sample collection or for the term of this permit, whichever ever is greater, records of all monitoring information collected during the term of this permit. Permittees must submit such monitoring results to the Director upon the requests of the Director, and submit a summary of such result as part of renotification requirements in accordance with Part II.F (renotification).

Part VII. *Standard Permit Conditions*

A. *Duty to Comply.*

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. *Penalties for Violations of Permit Conditions.*

a. *Criminal.*

(1). *Negligent violations.*—The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

(2). *Knowing violations.*—The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

(3). *Knowing endangerment.*—The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by

imprisonment for not more than 15 years, or both.

(4). *False statement.*—The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See section 309(c)(4) of the Clean Water Act).

b. *Civil penalties.*—The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation.

c. *Administrative penalties.*—The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

(1). *Class I penalty.*—Not to exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000.

(2). *Class II penalty.*—Not to exceed \$10,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$125,000.

B. Continuation of the Expired General Permit

This permit expires on October 1, 1997. However, an expired general permit continues in force and effect until a new general permit is issued. Permittees must submit a new NOI in accordance with the requirements of Part II of this permit, using a NOI form provided by the Director (or photocopy thereof) between August 1, 1997 and September 29, 1997 to remain covered under the continued permit after October 1, 1997. Facilities that had not obtained coverage under the permit by October 1, 1997 cannot become authorized to discharge under the continued permit.

C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or

reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to Provide Information

The permittee shall furnish to the Director, within a time specified by the Director, any information which the Director may request to determine compliance with this permit. The permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, he or she shall promptly submit such facts or information.

G. Signatory Requirements

All Notices of Intent, Notices of Termination, storm water pollution prevention plans, reports, certifications or information either submitted to the Director (and/or the operator of a large or medium municipal separate storm sewer system), or that this permit requires be maintained by the permittee, shall be signed.

1. All Notices of Intent shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality: State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a

Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).

2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Director.

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

c. *Changes to authorization.* If an authorization under paragraph VII.G.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new notice of intent satisfying the requirements of paragraph II.C must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. *Certification.* Any person signing documents under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports

Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other

document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both.

I. Penalties for Falsification of Monitoring Systems

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in section 309 of the CWA.

J. Oil and Hazardous Substances Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

K. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

M. Requiring an Individual Permit or an Alternative General Permit

1. The Director may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Director to take action under this paragraph. The Director may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a

statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Individual permit applications shall be submitted to the address of the appropriate Regional Office shown in Part VI.D.1.d (reporting: where to submit) of this permit. The Director may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application as required by the Director, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

2. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2F) with reasons supporting the request to the Director. Individual permit applications shall be submitted to the address of the appropriate Regional Office shown in Part VI.D.1.c of this permit. The request may be granted by the issuance of any individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is authorized for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Director.

N. State/Environmental Laws

1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or

penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the Act.

2. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

O. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

P. Monitoring and Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 6 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

3. *Records contents.*—Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were initiated;
- e. The initials or name(s) of the individual(s) who performed the analyses;
- f. References and written procedures, when available, for the analytical techniques or methods used; and
- g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

4. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

Q. Inspection and Entry

The permittee shall allow the Director or an authorized representative of EPA, the State, or, in the case of a facility which discharges through a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

R. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

S. Bypass of Treatment Facility

1. Notice:

a. Anticipated bypass. If a permittee subject to the numeric effluent limitation of Part V.A of this permit knows in advance of the need for a bypass, he or she shall submit prior notice, if possible, at least ten days before the date of the bypass; including an evaluation of the anticipated quality and effect of the pass.

b. Unanticipated bypass. The permittee subject to the numeric effluent limitation of Part V.A of this permit shall submit notice of an unanticipated bypass. Any information regarding the unanticipated bypass shall be provided orally within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee became aware of the circumstances. The written submission shall contain a description of the bypass and its cause; the period of the bypass; including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or

planned to reduce, eliminate, and prevent reoccurrence of the bypass.

2. Prohibition of bypass:

a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass. Unless:

- (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee should, in the exercise of reasonable engineering judgment, have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (3) The permittee submitted notices of the bypass.

b. The Director may approve an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed in Part VII.S.2.a.

T. Upset Conditions

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based numeric effluent limitations in Part V.A of this permit if the requirements of paragraph 2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, if final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

a. An upset occurred and that the permittee can identify the specific cause(s) of the upset;

b. The permitted facility was at the time being properly operated; and

c. The permittee provided oral notice of the upset to EPA within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee became aware of the circumstances. The written submission shall contain a description of the upset and its cause; the period of the upset; including exact dates and times, and if the upset has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the upset.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

Part VIII. Reopener Clause

A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the owner or operator of such discharge may be required to obtain individual permit or an alternative general permit in accordance with Part VII.M (requiring an individual permit or alternative general permit) of this permit or the permit may be modified to include different limitations and/or requirements.

B. Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64 and 124.5.

Part IX. Termination of Coverage

A. Notice of Termination

Where all storm water discharges associated with industrial activity that are authorized by this permit are eliminated, or where the operator of storm water discharges associated with industrial activity at a facility changes, the operator of the facility may submit a Notice of Termination that is signed in accordance with Part VII.G (signatory requirements) of this permit. The Notice of Termination shall include the following information:

1. Name, mailing address, and location of the facility for which the notification is submitted. Where a street address for the site is not available, the location of the approximate center of the site must be described in terms of the latitude and longitude to the nearest 15 seconds, or the section, township and range to the nearest quarter section;

2. The name, address and telephone number of the operator addressed by the Notice of Termination;

3. The NPDES permit number for the storm water discharge associated with industrial activity identified by the Notice of Termination;

4. An indication of whether the storm water discharges associated with industrial activity have been eliminated or the operator of the discharges has changed; and

5. The following certification signed in accordance with Part VII.G (signatory requirements) of this permit:

"I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or

that I am no longer the operator of the industrial activity. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act."

B. Addresses

All Notices of Termination are to be sent, using the form provided by the Director (or a photocopy thereof),⁴ to the Director of the NPDES program in care of the following address: Storm Water Notice of Termination, PO Box 1185, Newington, VA 22122.

Part X. Definitions

Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Coal pile runoff means the rainfall runoff from or through any coal storage pile.

CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).

Director means the Regional Administrator or an authorized representative.

Flow-weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Large and medium municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or (ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or (iii) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

NOI means notice of intent to be covered by this permit (see Part II of this permit.)

NOT means notice of termination (see Part II of this permit.)

Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria. See Addendum B of this permit.

Significant materials includes, but is not limited to: raw materials; fuels;

materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm water associated with industrial activity means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in paragraphs (i) through (x) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (xi) of this definition, the term includes only storm water discharges from all areas (except access roads and rail lines) listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the:

⁴ A copy of the approved NOT form is provided in Appendix D of this notice.

storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi) of this definition) include those facilities designated under 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this definition);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373;

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received

from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45 and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity including clearing, grading and excavation activities except operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (i)-(x)).⁵

⁵ On June 4, 1992, the United States Court of Appeals for the Ninth Circuit remanded the exclusion for manufacturing facilities in category (xi) which do not have materials or activities exposed to storm water to the EPA for further rulemaking. (Nos. 90-70671 and 91-70200).

Time-weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with the numeric effluent limitations of part V of this permit because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste pile means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

Waters of the United States means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands";

(c) All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

Part XI. State Specific Conditions

The provisions of this part provide modifications or additions to the applicable conditions of parts I through

IX of this permit. Part X of this permit does not establish special provisions for the States of Maine, New Hampshire, South Dakota, Johnson Atoll, Midway, Wake Island, New Mexico (Indian lands), Montana (Indian lands), North Dakota (Indian lands), Utah (Indian lands), Wyoming (Indian lands).

Region 1

A. *Maine*. Maine 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under This Permit

A. *Permit Area*. This permit covers all areas administered by EPA Region 1 in the State of Maine.

2. The following section is added to Part VI of the permit:

Part VI. Monitoring and Reporting Requirements

c. *Toxicity Testing*.

3. The discharge described will not lower the quality of the receiving waters below the minimum requirements of their classification and will satisfy the appropriate requirements of Maine Law provided that the test organisms include *ceriodaphnia dubia* and brook trout, *salvelinus fontinalis*, to meet the whole effluent toxicity requirements for certain storm water discharges associated with industrial activity.

Region 6

B. *Louisiana*. Louisiana 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under This Permit

A. *Permit Area*. The permit covers all areas administered by EPA Region 6 in the State of Louisiana.

2. Part IV of the permit is revised to read:

Part IV. Storm Water Pollution Prevention Plans

A storm water pollution prevention plan shall be developed for each facility covered by this permit. The pollution prevention plan shall provide for compliance with numeric effluent limitations as part V.B. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to

affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

3. The following section is added to part V of the Permit:

Part V. Numeric Effluent Limitations

A. *Coal Pile Runoff*.
 B. *Limitations For All Discharges of Storm Water Associated With Industrial Activity*.

1) General Limitations: Effective 10/1/95.

Parameter	Daily maximum
Total Organic Carbon (TOC)	50 mg/1
Oil & Grease	15 mg/1

2) Oil & Gas Exploration and Production Facilities: Effective 10/1/92.

Parameter	Daily maximum
Chemical Oxygen Demand (COD)	100 mg/1
Total Organic Carbon (TOC)	50 mg/1
Oil & Grease	15 mg/1
Chlorides	

a) Maximum chloride concentration of the discharge shall not exceed two times the ambient concentration of the receiving water in brackish marsh areas.

b) Maximum chloride concentration of the discharge shall not exceed 500 mg/1 in freshwater or intermediate marsh areas and upland areas.

Facilities without monitoring requirements must insure the pollution prevention plan developed in accordance with part IV will insure compliance with these effluent limitations.

4. Part VI.B.2 of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

B. *Monitoring Requirements*.

2. Semi-Annual Monitoring Requirements.

a. *Section 313 of SARA Title III Facilities*. In addition to any monitoring required by parts VI.B.2.b through f or parts VI.B.3.a through d, facilities with storm water discharges associated with industrial activity that are subject to requirements to report releases into the environment under section 313 of EPCRA for chemicals which are classified as 'section 313 water priority chemicals' are required to monitor storm water that is discharged from the facility that comes into contact with any equipment, tank, container or other vessel or area used for storage of a section 313 water priority chemical, or located at a truck or rail car loading or unloading area where a section 313 water priority chemical is handled for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/l); Five Day Biochemical Oxygen Demand (BOD5) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (mg/L); Total Kjeldahl Nitrogen (TKN) (mg/L); Total Phosphorus (mg/L); pH; acute whole effluent toxicity; and any section 313 water priority chemical for which the facility is subject to reporting requirements under section 313 of the Emergency Planning and Community Right to Know Act of 1986.

b. *Primary Metal Industries*. Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/l); Five Day Biochemical Oxygen Demand (BOD5) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (mg/L); pH; Acute Whole Effluent Toxicity; Total Lead (mg/L); Total Cadmium (mg/L); Total Copper (mg/L); Total Arsenic (mg/L); Total Chromium (mg/L); and any pollutant limited in an effluent guideline to which the facility is subject.

c. *Land Disposal Units/Incinerators/BIFs*. Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump without a stabilized final cover that has received any industrial wastes (other than wastes from a construction site); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility for: Ammonia (mg/L),

Magnesium (total) (mg/L), Magnesium (dissolved) (mg/L), Nitrate plus Nitrite Nitrogen (mg/L), Chemical Oxygen Demand (COD) (mg/L), Total Dissolved Solids (TDS) (mg/L), Total Organic Carbon (TOC) (mg/L), Oil and Grease (mg/L), pH, Total Arsenic (mg/L), Total Barium (mg/L), Total Cadmium (mg/L), Total Chromium (mg/L), Total Cyanide (mg/L), Total Lead (mg/L), Total Mercury (mg/L), Total Selenium (mg/L), Total Silver (mg/L), and Acute Whole Effluent Toxicity.

d. *Wood Treatment.* Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L), Total Organic Carbon (TOC) (mg/l); pH, Five Day Biochemical Oxygen Demand (BOD5) (mg/L), Chemical Oxygen Demand (COD) (mg/L), and Total Suspended Solids (TSS) (mg/L). In addition, facilities that use chlorophenolic formulations shall measure Pentachlorophenol (mg/L) and Acute Whole Effluent Toxicity; facilities which use creosote formulations shall measure Acute Whole Effluent Toxicity; and facilities that use chromium-arsenic formulations shall measure Total Arsenic (mg/L), Total Chromium (mg/L), and Total Copper (mg/L).

e. *Coal Pile Runoff.* Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/l); pH; Total Suspended Solids (TSS) (mg/L); Total Copper (mg/l); Total Nickel (mg/l) and Total Zinc (mg/l).

f. *Battery Reclaimers.* Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/l); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); pH; Total Copper (mg/l); and Total Lead (mg/l).

5. Part VI.B.3 of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

* * * * *

B. Monitoring Requirements.

* * * * *

3. Annual Monitoring Requirements.

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a. *Airports.* At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility when deicing activities are occurring for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/l); Five Day Biochemical Oxygen Demand (BOD5) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); pH; and the primary ingredient used in the deicing materials used at the site (e.g. ethylene glycol, urea, etc.).

b. *Coal-fired Steam Electric Facilities.* Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 423—which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L), Total Organic Carbon (TOC) (mg/l); pH, Total Suspended Solids (TSS) (mg/L), Total Copper (mg/l), Total Nickel (mg/l) and Total Zinc (mg/l).

c. *Animal Handling/Meat Packing.* Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/l); Five Day Biochemical Oxygen Demand (BOD5) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); Total Kjeldahl Nitrogen (TKN) (mg/L); Total Phosphorus (mg/L); pH; and Fecal Coliform (counts per 100 ml).

d. *Additional Facilities.* Facilities with storm water discharges associated with industrial activity that:

(i) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);

(ii) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;

(iii) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;

(iv) are from oil handling sites at oil fired steam electricpower generating facilities;

(v) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411—which are not eligible for coverage under this permit);

(vi) are from ready-mixed concrete facilities; or

(vii) are from ship building and repairing facilities;

Are required to monitor such storm water discharged from the facility for: Oil and Grease (mg/L); Total Organic Carbon (TOC) (mg/L); Chemical Oxygen Demand (COD) (mg/L); Total Suspended Solids (TSS) (mg/L); pH; and any pollutant limited in an effluent guideline to which the facility is subject.

* * * * *

6. Part VI.C of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

* * * * *

c. *Toxicity Testing.* Permittees that are required to monitor for acute whole effluent toxicity shall initiate the series of tests described below within 180 days after the issuance of this permit or within 90 days after the commencement of a new discharge.

1. Test Procedures

* * * * *

c. Tests shall be conducted semiannually (twice per year) on a grab sample of the discharge at 100 percent strength (no dilution) and a control consisting of synthetic dilution water.

Results of all tests conducted with any species shall be prepared according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report retained on-site. Results of the testing shall be summarized on Table VI-A and submitted to EPA with the Discharge Monitoring Reports (DMR's). On the DMR, the permittee shall report results of the testing in accordance with questions 1-4 of Table VI-A.

Table VI-A (Sheet 1 of 2)

Permittee: _____
 NPDES permit: _____
 Outfall(s): _____

Daphnia pulex Survival

	Time	Date
Composite sample collected.....		
Test initiated.....		

Dilution water used: _____ Receiving stream _____ synthetic water.

Time	Replicate	Percent effluent (%)	
		0	100
24 Hr.	A		
	B		
	C		
	D		
	Mean		

1. Is the mean survival at 24 hours > 50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TEE3D. Otherwise, enter a 0.

2. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

No _____ Yes _____

If you report a YES, enter a 1 on the DMR Form, Parameter No. TGE3D. Otherwise, enter a 0.

Table VI-A (Sheet 2 of 2)

Permittee: _____
 NPDES permit: _____
 Outfall(s): _____

Fathead minnow (*Pimephales promelas*) Survival

	Time	Date
Composite sample collected.....		

	Time	Date
Test initiated.....		

Dilution water used: _____ Receiving stream _____ synthetic water.

Time	Replicate	Percent effluent (%)	
		0	100
24 Hr.	A		
	B		
	C		
	D		
	Mean		

3. Is the mean survival at 24 hours > 50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE6C. Otherwise, enter a 0.

4. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____

If you report a YES, enter a 1 on the DMR Form, Parameter No. TEE6C. Otherwise, enter a 0.

7. The following definitions are added to Part X of the permit:

Part X. Definitions

Brackish Marshes—those areas that are inundated or saturated by surface water or groundwater of moderate salinity at a frequency and duration sufficient to support, and that under normal circumstances do support, emergent vegetation characterized by a prevalence of species typically adapted for life in these soil and contiguous surface water conditions. Typical vegetation includes wiregrass (*Spartina patens*), three-cornered grass (*Scirpus olneyi*), coco (*Scirpus robustus*), and widgeongrass (*Ruppia maritima*). Interstitial water salinity normally ranges between 7 and 15 parts per thousand. (LAC 33:IX.708)

Freshwater Swamps and Marshes—those areas that are inundated or saturated by surface water or groundwater of negligible to very low salinity at a frequency and duration sufficient to support, and that under normal circumstances do support, emergent vegetation characterized by a prevalence of species typically adapted for life in these soil and contiguous surface water conditions. Typical vegetation includes maiden cane (*Panicum hemitomon*), *Hydrocotyl sp.*, water hyacinth (*Eichhornia crassipes*),

pickerelweed (*Pontederia cordata*), alligatorweed (*Alternanthera philoxeroides*), and bulltongue (*Sagittaria sp.*). Interstitial water salinity is normally less than 2 parts per thousand. (LAC 33:IX.708)

Intermediate Marshes—those areas that are inundated or saturated by surface water or groundwater of salinity at a frequency and duration sufficient to support, and that under normal circumstances do support, emergent vegetation characterized by a prevalence of species typically adapted for life in these soil and contiguous surface water conditions. Typical vegetation includes wiregrass (*Spartina patens*), deer pea (*Vigna repens*), bulltongue (*Sagittaria sp.*), wild millet (*Echinochloa walteri*), bullwhip (*Scirpus californicus*), and sawgrass (*Cladium jamaicense*). Interstitial water salinity normally ranges between 3 and 6 parts per thousand. (LAC 33:IX.80)

Saline Marshes—those wetland areas that are inundated or saturated by surface water or groundwater of salinity characteristic of near Gulf of Mexico ambient water at a frequency and duration sufficient to support, and that under normal circumstances do support, emergent vegetation characterized by a prevalence of species typically adapted for life in these soil and contiguous surface water conditions. Typical vegetation includes oystergrass (*Spartina alterniflora*), glasswort (*Salicornia sp.*), black rush (*Juncus roemerianus*), *Batis maritima*, black mangrove (*Avicennia nitida*), and saltgrass (*Distichlis spicata*). Interstitial water salinity normally exceeds 16 parts per thousand. (LAC 33:IX.708)

Upland—any land area that is not normally inundated with water and that would not, under normal circumstances, be characterized as swamp or fresh, intermediate, brackish, or saline marsh. The term shall have both a regional and site-specific connotation; for example, naturally occurring and man-made topographic highs that are partially or totally surrounded by swamp, marsh, or open water will be considered upland on a local basis, but will not necessitate characterization of the surrounding area as upland. The land and water bottoms of all parishes north of the nine parishes contiguous with the Gulf of Mexico shall be determined on a case-by-case basis with reference to the presences of a regional expanse of emergent aquatic vegetation or open water. (LAC 33:IX.708)

C. *New Mexico*. New Mexico 401 certification special permit conditions revise the permit as follows:

1. Part I.A. of the permit is revised to read:

Part I. Coverage Under this Permit

A. *Permit Area.* The permit covers all areas administered by EPA Region 6 in the State of New Mexico.

2. Part VI.B of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

B. Monitoring Requirements.

2. *Semi-Annual Monitoring Requirements.* During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in parts VI.B.2.a through f. must monitor those storm water discharges identified below at least semi-annually (2 times per year) except as provided in VI.B.6 (sampling waiver), VI.B.7 (representative discharge), and VI.C.1 (toxicity testing). Permittees with facilities identified in parts VI.B.2.a through f (below) must report in accordance with part VI.D (reporting: where to submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

3. *Annual Monitoring Requirements.* During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in parts VI.B.3.a through d. (below) must monitor those storm water discharges identified below at least annually (1 time per year) except as provided in VI.B.6 (sampling waiver), and VI.B.7 (representative discharge). Permittees with facilities identified in parts VI.B.3.a through d. (below) are not required to submit monitoring results. However, such permittees must retain monitoring results in accordance with part VI.E (retention of records). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the

duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

4. Discharges to Domestic Water Supplies.

a. During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities discharging into waters of the State of New Mexico designated by the latest design of *Water Quality Standards for Interstate and Intrastate Streams in New Mexico* for use as a domestic water supply (See Appendix * * *) must monitor those storm water discharges into the domestic water supply waterbody at least annually (once per year) except as provided in VI.B.6 (sampling waiver), and VI.B.7 (representative discharge). These monitoring requirements for the parameters listed below are in addition to any monitoring required under parts VI.B.2 (semi-annual monitoring) or part VI.B.3 (annual monitoring requirements). Monitoring results must be reported in accordance with part VI.D. (reporting: where to submit). In addition to the parameters listed below, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled;

Parameter	Reportable quantity action level
Dissolved arsenic.....	0.05 mg/1.
Dissolved barium.....	1.0 mg/1.
Dissolved cadmium.....	0.010 mg/1.
Dissolved chromium.....	0.05 mg/1.
Dissolved lead.....	0.05 mg/1.
Total mercury.....	0.002 mg/1.
Dissolved nitrate (as N).....	10.0 mg/1.
Dissolved selenium.....	0.05 mg/1.
Dissolved silver.....	0.05 mg/1.
Dissolved cyanide.....	0.2 mg/1.
Dissolved uranium.....	5.0 mg/1.
Radium-226 + radium-228.....	30.0 pCi/1.

b. If the concentration of any sample exceeds a Reportable Quantity Action Level listed above, the permittee shall, within 24 hours of receipt of the sampling data, submit the results of the sample analysis to the State at the address specified in part VI.D.2.b (additional notification: where to submit). Dischargers occurring on Indian

Nations shall submit the required report directly to EPA Region 6 at the address specified in part VI.D., with a copy provided to the Governing Body of the Indian Nation.

5. *Sample Type.* For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for both a grab sample and a composite sample. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 150 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. There shall be a minimum of 60 days between sampled events for facilities required to monitor semi-annually (twice per year). The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes was impracticable. The composite sample shall either be flow-weighted or time-weighted. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. Only grab samples must be collected and analyzed for the determination of pH, cyanide, whole effluent toxicity, and oil and grease.

6. Sampling Waiver

7. Representative Discharge

8. Alternative Certification

9. Alternative to WET Parameter

3. Part VI.C of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

C. *Toxicity Testing.* Permittees that are required to monitor for acute whole effluent toxicity shall initiate the series

of tests described below within 180 days after the issuance of this permit or within 90 days after the commencement of a new discharge.

1. Test Procedures

C. Tests shall be conducted semiannually (twice per year) on a grab sample of the discharge at 100 percent strength (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be prepared according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report retained on-site. Results of the testing shall be summarized on Table VI-A and submitted to EPA with the Discharge Monitoring Reports (DMR's). On the DMR, the permittee shall report results of the testing in accordance with questions 1-4 of Table VI-A.

Permittee: _____
 NPDES Permit: _____
 Outfall(s): _____

Daphnia pulex Survival

	Time	Date
Composite sample collected.....		
Test initiated.....		

Dilution water used: _____ Receiving stream _____ Synthetic water.

Time	Replicate	Percent effluent (%)	
		0	100
24 Hr	A.....		
	B.....		
	C.....		
	D.....		
	Mean.....		

1. Is the mean survival at 24 hours >50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE3D. Otherwise, enter a 0.

2. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____

If you report a YES, enter a 1 on the DMR Form, Parameter No. TEE3D. Otherwise, enter a 0.

Permittee: _____
 NPDES Permit: _____
 Outfall(s): _____

Fathead Minnow (*Pimephales promelas*) Survival

	Time	Date
Composite sample collected.....		
Test initiated.....		

Dilution water used: _____ Receiving stream _____ Synthetic water.

Time	Replicate	Percent effluent (%)	
		0	100
24 hr	A.....		
	B.....		
	C.....		
	D.....		
	Mean.....		

3. Is the mean survival at 24 hours >50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE6C. Otherwise, enter a 0.

4. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____

If you report a YES, enter a 1 on the DMR Form, Parameter No. TEE6C. Otherwise, enter a 0.

4. Part VI.D.1.e of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

* * * * *

D. Reporting: Where to Submit.

1.

* * * * *

e. Permittees with facilities identified only in Part VI.B.3 (annual monitoring) or VI.B.4 (discharges to domestic water supplies), are not required to submit monitoring results, unless required in writing by the Director or by the provisions of Part VI.B.4.b. (discharges to domestic water supplies: 24 hour reporting).

5. Part VI.D.2.b of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

* * * * *

D. Reporting: Where to Submit.

* * * * *

2. Additional Notification.

* * * * *

b. Facilities located in the following States shall provide copies of discharge monitoring reports required under Parts VI.D.1.a, VI.D.1.b, and VI.D.1.c, individual permit applications and all other reports required herein, to the Director of the appropriate State Agency at the address listed below:

New Mexico

Program Manager, New Mexico Environment Department, Surface Water Quality Bureau, Surface Water Section, 1190 St. Francis Drive, P.O. Box 26110, Santa Fe, New Mexico, 87502

APPENDIX * * *.—NEW MEXICO RIVER SEGMENTS DESIGNATED FOR USE AS A DOMESTIC WATER SUPPLY

No.	Description
2-106	The Jemez River and all its tributaries above State Highway 4 near the town of Jemez Springs and the Guadalupe River and all its tributaries.
2-107	Perennial reaches of Bluewater Creek, Rio Moquino, Seboyeta Creek, Rio Paguante, the Rio Puerco within the Santa Fe National Forest, and all other perennial reaches of tributaries to the Rio Puerco including the Rio San Jose in Cibola County from the USGS gaging station at Correo upstream to Horace Springs.
2-112	The perennial reaches of Rio Vallecitos and its tributaries, and Rio del Oso, and El Rito Creek above the town of El Rito.
2-116	All perennial reaches of tributaries to the Rio Chama above Abiquiu Reservoir except the Rio Gallina and Rio Puerco se Chama north of State Highway 96 and the main stem of the Rio Chama from the headwaters of El Vado Reservoir upstream to the New Mexico-Colorado line.
2-118	Perennial tributaries to the Rio Grande in Bandelier National Monument and their headwaters in Sandoval County, all perennial reaches of tributaries to the Rio Grande in Santa Fe County unless included in other segments.
2-120	The Red River upstream of the mouth of Placer Creek, all tributaries to the Red River, and all other perennial reaches of tributaries to the Rio Grande in Taos and Rio Arriba counties unless included in other segments.
2-209	Eagle Creek above the Alto Reservoir, Bonito Creek upstream of Angus, and the Rio Ruidoso and its tributaries above Seeping Springs Lakes.
2-212	The Gallinas River and all its tributaries above the diversion for the Las Vegas municipal reservoir and perennial reaches of Tecolote Creek and its perennial tributaries.

APPENDIX * * *—NEW MEXICO RIVER SEGMENTS DESIGNATED FOR USE AS A DOMESTIC WATER SUPPLY—Continued

No.	Description
2-214	Cow Creek and all its tributaries and the main stem of the Pecos River from one river mile below the bridge on State Highway 223 upstream to its headwaters, including all tributaries thereto.
2-306	The Mora River and its tributaries above Mora, all tributaries to the Mora River upstream from State Highway 518, Coyote Creek, the Cimarron River above State Highway 21 in Cimarron, all tributaries to the Cimarron River, Rayado Creek above Miami Lake Diversion, Ocate Creek and its tributaries upstream of Ocate, and all other tributaries to the Canadian River northwest and north of U.S. Highway 64 in Colfax County unless included in other segments.
2-503	The main stem of Gila River from Gila Hot Springs upstream to the headwaters and all perennial tributaries to the Gila River at or above the town of Cliff.
2-603	All perennial reaches of tributaries to the San Francisco River at or above the town of Glenwood.
2-802	Perennial reaches of Three Rivers.
2-804	The Mimbres River upstream of the USGS gaging station at Mimbres and all perennial tributaries thereto.
2-805	Perennial reaches of the Sacramento River (Sacramento-Salt Flat Closed Basin) and all perennial tributaries thereto.

D. *Oklahoma*. Oklahoma 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage under this Permit

A. *Permit Area*. The permit covers all areas administered by EPA Region 6 in the State of Oklahoma.

2. The following section is added to Part I.B.3 of the permit:

B. *Eligibility*.

3. *Limitations on Coverage*. The following storm water discharges associated with industrial activity are not authorized by this permit:

h. "new" point source discharges of storm water associated with industrial activity (those commencing after the June 25, 1992, effective date of the Oklahoma Water Quality Standards—Oklahoma Annotated Code Title 785, Chapter 45) to the following waters:

- (i) waterbodies designated as "Outstanding Resource Waters" and/or "Scenic Rivers" in Appendix A of the Oklahoma Water Quality Standards;
- (ii) Oklahoma waterbodies located within the watersheds of waterbodies designated as "Scenic Rivers" in Appendix A of the Oklahoma Water Quality Standards; and
- (iii) waterbodies located within the boundaries of Oklahoma Water Quality Standards Appendix B areas which are specifically designated as "Outstanding Resource Waters" in Appendix A of the Oklahoma Water Quality Standards.

3. Part VI.C.1.c of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

c. *Toxicity Testing*.

1. *Test Procedures*

c. Tests shall be conducted semiannually (twice per year) on a grab sample of the discharge at 100 percent strength (no dilution) and a control consisting of synthetic dilution water. Results of all tests conducted with any species shall be prepared according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report retained on-site. Results of the testing shall be summarized on Table VI-A and submitted to EPA with the Discharge Monitoring Reports (DMR's). On the DMR, the permittee shall report results of the testing in accordance with questions 1-4 of Table VI-A.

Table VI-A (Sheet 1 of 2)

Permittee: _____
 NPDES Permit: _____
 Outfall(s): _____

Daphnia pulex Survival

	Time	Date
Composite Sample Collected.....		
Test Initiated.....		

Dilution Water Used: _____ Receiving Stream _____ Synthetic Water.

Time	Replicate	Percent Effluent (%)	
		0	100
24 Hr.	A.....		
	B.....		
	C.....		
	D.....		
	Mean.....		

1. Is the mean survival at 24 hours >50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE3D. Otherwise, enter a 0.

2. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____

Yes _____ No _____

If you report a YES, enter a 1 on the DMR Form, Parameter No. TEE3D. Otherwise, enter a 0.

Table VI-A (Sheet 2 of 2)

Permittee: _____
 NPDES Permit: _____
 Outfall(s): _____

Fathead Minnow (*Pimephales promelas*) Survival

	Time	Date
Composite Sample Collected.....		
Test Initiated.....		

Dilution Water Used: _____ Receiving Stream _____ Synthetic Water

Time	Replicate	Percent Effluent (%)	
		0	100
24 Hr.	A.....		
	B.....		
	C.....		
	D.....		
	Mean.....		

3. Is the mean survival at 24 hours >50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE6C. Otherwise, enter a 0.

4. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____#

If you report a YES, enter a 1 on the DMR Form, Parameter No. TEE6C. Otherwise, enter a 0.

4. The following section is added to Part VIII of the permit:

Part VIII. Reopener Clause

C. This permit may be reopened and modified if the State of Oklahoma

adopts new or revises existing water quality requirements regarding the discharge of storm water.

E. Texas. Texas 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under This Permit

A. *Permit Area.* This permit covers all areas administered by EPA Region 6 in the State of Texas.

2. The following sections are added to Part V of the permit:

Part V. Numeric Effluent Limitations

B. All Discharges to Inland Waters

The maximum allowable concentrations of each of the hazardous metals, stated in terms of milligrams per liter (mg/l), for discharges to inland waters are as follows:

Total metal	Monthly average	Daily composite	Single grab
Arsenic.....	0.1	0.2	0.3
Barium.....	1.0	2.0	4.0
Cadmium.....	0.05	0.1	0.2
Chromium.....	0.5	1.0	5.0
Copper.....	0.5	1.0	2.0
Lead.....	0.5	1.0	1.5
Manganese.....	1.0	2.0	3.0
Mercury.....	0.005	0.005	0.01
Nickel.....	1.0	2.0	3.0
Selenium.....	0.05	0.1	0.2
Silver.....	0.05	0.1	0.2
Zinc.....	1.0	2.0	6.0

C. All Discharges to Tidal Waters

The maximum allowable concentrations of each of the hazardous metals, stated in terms of milligrams per liter (mg/l), for discharges to tidal waters are as follows:

Total metal	Monthly average	Daily composite	Single grab
Arsenic.....	0.1	0.2	0.3
Barium.....	1.0	2.0	4.0
Cadmium.....	0.1	0.2	0.3
Chromium.....	0.5	1.0	5.0
Copper.....	0.5	1.0	2.0
Lead.....	0.5	1.0	1.5
Manganese.....	1.0	2.0	3.0
Mercury.....	0.005	0.005	0.01
Nickel.....	1.0	2.0	3.0
Selenium.....	0.1	0.2	0.3
Silver.....	0.05	0.1	0.2
Zinc.....	1.0	2.0	6.0

3. Part VI.B.2.d of the permit is revised to read:

Part VI. Monitoring and Reporting Requirements

B. Monitoring Requirements

2. Semi-Annual Monitoring Requirements

d. *Wood Treatment.* Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility for: oil and grease (mg/L), pH, BOD5 (mg/L), COD (mg/L), and TSS (mg/L). In addition, facilities that use chlorophenolic formulations shall measure pentachlorophenol (mg/L) and acute whole effluent toxicity; facilities which use creosote formulations shall measure acute whole effluent toxicity; and facilities that use chromium-arsenic formulations shall measure acute whole effluent toxicity, total arsenic (mg/L), total chromium (mg/L), and total copper (mg/L).

4. Parts VI.C and VI.C.1 of the permit are revised to read:

Part VI. Monitoring and Reporting Requirements

C. *Toxicity Testing.* Permittees that are required to monitor for acute whole effluent toxicity shall initiate the series of tests described below within 180 days after the issuance of this permit or within 90 days after the commencement of a new discharge.

The permittee shall test the effluent for lethality in accordance with the provisions of this section. Such testing will determine if an effluent sample meets the Texas Surface Water Quality Standard listed at 31 TAC § 307.6(e)(2)(B) of greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

1. Test Procedures

a. The permittee shall conduct acute 24 hour static toxicity tests on both an appropriate invertebrate and an appropriate fish (vertebrate) test species (EPA/600/4-90-027 Rev. 9/91, Section 6.1). Freshwater species must be used for discharges to freshwater water bodies. Due to the non-saline nature of rainwater, freshwater test species should also be used for discharges to estuarine, marine or other naturally saline waterbodies.

The following tests shall be used:

1. Acute static 24-hour definitive toxicity test using *Daphnia pulex*. A minimum of four (4) replicates with a minimum of five (5) organisms per replicate shall be used for this test.
2. Acute static 24-hour definitive toxicity test using fathead minnow (*Pimephales promelas*). A minimum of four (4) replicates with a minimum of ten (10) organisms per replicate shall be used for this test.

b. Five dilutions in addition to an appropriate control (0% effluent), shall be used in the toxicity tests. These effluent concentrations shall be 6%, 13%, 25%, 50% and 100%. The control and/or dilution water shall consist of a standard, synthetic, moderately hard, reconstituted water. If more than 10% of the test organisms in any control die, that test, including the control and all effluent dilution(s), shall be repeated, with all results from both tests reported as per paragraph d. of this section.

c. All test organisms, procedures and quality assurance criteria used shall be in accordance with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA/600/4-90-027 (Rev. September 1991). EPA has proposed to establish regulations regarding these test methods (December 4, 1989, 53 FR 50216).

d. Tests shall be conducted semiannually (twice per year) on a grab sample of the discharge at 100% strength (no dilution), the dilutions specified in paragraph b. above, and a control consisting of either receiving water or synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report retained onsite. The test results shall be summarized in the format used on Table VI-A and submitted to EPA with the Discharge Monitoring Reports (DMR's). On the DMR, the permittee shall report test results in accordance with the instructions on Table VI-A.

Table VI-A (Sheet 1 of 2)

Permittee: _____
 NPDES Permit: _____
 Outfall(s): _____

Daphnia pulex Survival

	Time	Date
Composite Sample Collected.....	-	
Test Initiated.....		

Dilution Water Used: _____ Receiving Stream _____ Synthetic Water.

Time	Replicate	Percent Effluent (%)					
		0	100	50	25	13	6
24 Hr.	A.....						
	B.....						
	C.....						
	D.....						
	Mean.....						

1. Is the mean survival at 24 hours > 50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE3D. Otherwise, enter a 0.

2. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____

If you report a YES, enter a 1 on the DMR Form, Parameter No. TEE3D. Otherwise, enter a 0.

Table VI-A (Sheet 2 of 2)

Permittee: _____
 NPDES Permit: _____
 Outfall(s): _____

Fathead Minnow (*Pimephales promelas*) Survival

	Time	Date
Composite Sample Collected.....		
Test Initiated.....		

Dilution Water Used: _____ Receiving Stream _____ Synthetic Water.

Time	Replicate	Percent Effluent (%)					
		0	100	50	25	13	6
24 Hr.	A.....						
	B.....						
	C.....						
	D.....						
	Mean.....						

3. Is the mean survival at 24 hours > 50% in the 100% dilution?

Yes _____ No _____

If you report a NO, enter a 1 on the DMR Form, Parameter No. TGE6C. Otherwise, enter a 0.

4. Is there a statistically significant difference in survival at the 100% dilution as compared to the control (0%)?

Yes _____ No _____

If you report a YES, enter a 1 on the DRM Form, Parameter No. TEE6C. Otherwise, enter a 0.

5. The following definitions are added to Part X of the permit:

Part X. Definitions

"Inland Waters"—all surface waters in the State other than "tidal waters" as defined below.

"Tidal Waters"—those waters of the Gulf of Mexico within the jurisdiction of the State of Texas, bays and estuaries thereto, and those portions of the river systems which are subject to the ebb and flow of the tides, and to the intrusion of marine waters.

Region 8

F. Colorado (Federal facilities and Indian lands). There are no special conditions pursuant to Colorado 401 certification in this permit for storm water discharges associated with industrial activity located on Indian lands in Colorado. Colorado 401

certification special permit conditions for storm water discharges associated with industrial activity from Federal facilities is revised as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under this Permit

A. *Permit Area.* The permit covers all Federal Facilities administered by EPA Region 8 in the State of Colorado.

2. Part III.A.2.b of the permit is revised to read:

Part III. Special Conditions

A. *Prohibition on non-storm water discharges*

* * * * *

2. * * * * *

b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is in compliance with paragraph IV.D.3.g. (2) (measures and controls for non-storm water discharges): discharges from fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled

material has been removed) and where detergents are not used; air conditioning condensate that has not been contaminated by industrial activity and no chemicals have been added to it; naturally occurring springs which have not been altered by the industrial activity; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

3. Part III.B.c of the permit is revised to read:

Part III. Special Conditions

* * * * *

B. *Releases in excess of Reportable Quantities*

* * * * *

c. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken in accordance with paragraph III.B.1.b (above) of this permit to the appropriate EPA Regional Office at the address provided in Part VI.D.1.d (reporting: where to submit) of this permit and to the Colorado Water Quality Control Division at the following address: Colorado Department of Health, Water Quality Control Division.

4300 Cherry Creek Drive South, Denver, Colorado, 80222-1530. Attention: Permits and Enforcement.

4. Part IV.B.2 of the permit is revised to read:

Part IV. Storm Water Pollution Prevention Plans

B. Signature and Plan Review

2. The permittee shall make plans available upon request to the Director, or authorized representative, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system. Federal Facilities located on non-Indian lands in Colorado shall make plans available upon request to the Colorado Water Quality Control Division.

5. Part VIII of the permit is revised to read:

Part VIII. Reopener Clause

A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the owner or operator of such discharge may be required to obtain individual permit or an alternative general permit in accordance with Part VII.M (requiring an individual permit or alternative general permit) of this permit or the permit may be modified to include different limitations and/or requirements. If EPA develops new regulations which specifically impact storm water permit requirements or there is a change in statute which imposes additional requirements, this permit may be reopened and modified (following administrative procedures) to include the appropriate requirements.

Region 9

G. *Arizona.* Arizona 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under This Permit

A. *Permit Area.* The permit covers all areas administered by EPA Region 9 in the State of Arizona, excluding all Indian lands.

2. The following section is added to Part II of the permit:

Part II. Notice of Intent Requirements

F. *Special NOI Requirements for the State of Arizona.* NOIs shall also be submitted to the State of Arizona Department of Environmental Quality at the following address: Storm Water Coordinator, Arizona Department of Environmental Quality, P.O. Box 600, Phoenix, Arizona, 85001-0600.

NOIs submitted to the State of Arizona shall include the well registration number if storm water associated with industrial activity is discharged to a dry well or an injection well.

3. The following section is added to Part III of the permit:

Part III. Special Conditions

C. *Compliance with Water Quality Standards of the State of Arizona.* Discharges authorized by this permit shall not cause or contribute to a violation of any applicable water quality standard of the State of Arizona (A.G. Rule No. R92-006).

4. Part IV.D.7.b.(1).(b) of the permit is revised to read as follows:

Part IV. Storm Water Pollution Prevention Plans

D. Contents of Plan

7. *Additional requirements for storm water discharges associated with industrial activity from facilities subject to EPCRA Section 313 requirements.*

b.

(1) *Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals.*

(b) *Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals shall include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for the 25-year, 24-hour precipitation event, a strong spill contingency and integrity testing plan, and/or other equivalent measures.*

5. The following section is added to Part IX of the permit:

Part IX. Termination of Coverage

C. *Special NOT Requirement for the State of Arizona.* NOTs shall also be submitted to the State of Arizona Department of Environmental Quality at the following address: Storm Water Coordinator, Arizona Department of Environmental Quality, P.O. Box 600, Phoenix, Arizona 85001-0600.

6. The following definition is added to Part X of the permit:

Part X. Definitions

"Significant sources of non-storm water" includes, but is not limited to: discharges which could cause or contribute to violations or water quality standards of the State of Arizona, and discharges which could include releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Region 10

H. *Alaska.* Alaska 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under This Permit

A. *Permit Area.* The permit covers all areas administered by EPA Region 10 in the State of Alaska, except Federal Indian reservations.

2. Part II.C of the permit is revised to read:

Part II. Notice of Intent Requirements

C. *Where to Submit.*

1. Facilities which discharge storm water associated with industrial activity must use a NOI form provided by the Director (or photocopy thereof). The form in the Federal Register notice in which this permit was published may be photocopied and used. Forms are also available by calling (703) 821-4823. NOIs must be signed in accordance with Part VII.G (signatory requirements) of this permit. NOIs are to be submitted to the Director of the NPDES program in care of the following address: Storm Water Notice of Intent, PO Box 1215, Newington, VA, 22122.

2. A copy of initial Notice of Intent (NOI), any NOI for the continuation of

the general permit, and any Notice of Termination shall be submitted to the appropriate State regional office, attention Storm Water Coordinator, as follows:

Alaska Department of Environmental Conservation, Northern Regional Office, 1001 Noble Street, Suite 350, Fairbanks, Alaska 99701, (907) 452-1714. Fax: 451-2187.

Alaska Department of Environmental Conservation, Southeastern Regional Office, 410 W. Willoughby, Suite 105, Juneau, Alaska 99801, (907) 465-5350. Fax: 465-5362.

Alaska Department of Environmental Conservation, Southcentral Regional Office, 3601 "C" Street, Suite 1334, Anchorage, Alaska 99503, (907) 563-6529. Fax: 562-4026.

Alaska Department of Environmental Conservation, Pipeline Corridor Regional Office, 411 W. 4th Ave., Suite 2C, Anchorage, Alaska, 99502, (907) 278-8594, Fax: 272-0690.

3. With the NOI to the State, a brief description of the activities to be covered shall be submitted. This shall be on a single sheet and shall describe the area to be disturbed to the nearest acre, the primary pollutants expected from the activities and the type of treatment to be provided.

3. Part III.B.1.c is revised to read as follows:

Part III. Special Conditions

B. Releases in excess of Reportable Quantities

1.

c. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken in accordance with paragraph III.B.1.b (above) of this permit to the appropriate EPA Regional Office at the address provided in Part VI.D.1.d (reporting: where to submit) of this permit and to the appropriate State regional office at the address provided in Part II.C.

4. Part IV.D of the permit is revised as follows:

Part IV. Storm Water Pollution Prevention Plans

D. Contents of Plan

Note: A copy of the Inventory of Exposed Materials (IV.D.2.b) and Spills and Leaks (IV.D.2.c) from the Pollution Prevention Plan shall be submitted by the plan preparation date stated in Part IV.A to the appropriate State Regional office.

5. The following section is added to Part VI.D.2 of the permit:

Part VI. Monitoring and Reporting Requirements

D. Reporting: Where to Submit

2. Additional Notification

b. Facilities located in Alaska shall provide copies of the discharge monitoring reports required under Parts VI.D.1.a, VI.D.1.b, and VI.D.1.c, individual permit applications and all other reports required herein, to the Director of the appropriate State Agency at the addresses listed below:

Alaska Department of Environmental Conservation, Northern Regional Office, 1001 Noble Street, suite 350, Fairbanks, Alaska 99701, (907) 452-1714. Fax: 451-2187.

Alaska Department of Environmental Conservation, Southeastern Regional Office, 410 W. Willoughby, suite 105, Juneau, Alaska 99801, (907) 465-5350. Fax: 465-5362.

Alaska Department of Environmental Conservation, Southcentral Regional Office, 3601 "C" Street, suite 1334, Anchorage, Alaska 99503, (907) 563-6529. Fax: 562-4026.

Alaska Department of Environmental Conservation, Pipeline Corridor Regional Office, 411 W. 4th Ave., suite 2C, Anchorage, Alaska 99502, (907) 278-8594. Fax: 272-0690.

I. Idaho.

Idaho 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised as follows:

Part I. Coverage Under This Permit

A. Permit Area

The permit covers all areas administered by EPA Region 10 in the State of Idaho.

2. The following section is added to Part III of the permit:

Part III. Special Conditions

C. All storm water shall be treated and disposed of in such a manner that

the round water standards of Idaho are not violated. Such standards are specified in Section 1.02299 of the "Idaho Water Quality Standards and Wastewater Treatment Requirements."

J. Washington (Federal facilities and Indian lands). Washington 401 certification special permit conditions revise the permit as follows:

1. Part I.A of the permit is revised to read:

Part I. Coverage Under This Permit

A. Permit Area. The permit covers all Federal Facilities administered by EPA Region 10 in the State of Washington.

2. The following section is added to Part III of the permit:

Part III. Special Conditions

C. Washington State Standards

1. This permit does not authorize the violation of ground water standards (Chapter 173-200 WAC), surface water standards (Chapter 173-201 WAC), or sediment management standards (Chapter 173-204 WAC) of the State of Washington. The point of compliance with surface water standards shall be determined after consideration of the assignment of a dilution zone as allowed under Chapter 173-201 WAC. The point of compliance with ground water standards shall be determined by applying the provisions of Chapter 173-200 WAC. The point of compliance with sediment management standards shall be determined in accordance with Chapter 173-204 WAC.

2. Diversion of storm water discharges to ground water from existing discharges to surface water shall not be authorized by this permit if this causes a violation or the potential for violation of ground water standards (Chapter 173-200 WAC). Such discharges below the surface of the ground are also regulated by the Underground Injection Control Program (Chapter 173-218 WAC).

3. Washington Department of Ecology (WDOE) is currently developing a "Storm Water Pollution Prevention Plan" which will require facilities to assess the potential of their storm water discharges to violate the Washington State surface water, ground water, or sediment management standards. Those discharges with a high potential to violate standards will be required to develop and implement a monitoring program.

Upon issuance of the "Storm Water Pollution Prevention Plan" by WDOE, EPA may reopen this permit to require facilities to assess their storm water

discharges and to require additional monitoring.

Addendum A

Pollutants identified in Tables II and III of Appendix D of 40 CFR 122.

Addendum A

Table II—Organic Toxic Pollutants in Each of Four Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GS/MS)

Volatiles

- acrolein
- acrylonitrile
- benzene
- bromoform
- carbon tetrachloride
- chlorobenzene
- chlorodibromomethane
- chloroethane
- 2-chloroethylvinyl ether
- chloroform
- dichlorobromomethane
- 1,1-dichloroethane
- 1,2-dichloroethane
- 1,1-dichloroethylene
- 1,2-dichloropropane
- 1,3-dichloropropylene
- ethylbenzene
- methyl bromide
- methyl chloride
- methylene chloride
- 1,1,2,2-tetrachloroethane
- tetrachloroethylene
- toluene
- 1,2-trans-dichloroethylene
- 1,1,1-trichloroethane
- 1,1,2-trichloroethane
- trichloroethylene
- vinyl chloride

Acid Compounds

- 2-chlorophenol
- 2,4-dichlorophenol
- 2,4-dimethylphenol
- 4,6-dinitro-o-cresol
- 2,4-dinitrophenol
- 2-nitrophenol
- 4-nitrophenol
- p-chloro-m-cresol
- pentachlorophenol
- phenol

Table II—Organic Toxic Pollutants in Each of Four Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GS/MS)—Continued

2,4,6-trichlorophenol

Base/Neutral

- acenaphthene
- acenaphthylene
- anthracene
- benzidine
- benzo(a)anthracene
- benzo(a)pyrene
- 3,4-benzofluoranthene
- benzo(ghi)perylene
- benzo(k)fluoranthene
- bis(2-chloroethoxy)methane
- bis(2-chloroethyl)ether
- bis(2-chloroisopropyl)ether
- bis(2-ethylhexyl)phthalate
- 4-bromophenyl phenyl ether
- butylbenzyl phthalate
- 2-chloronaphthalene
- 4-chlorophenyl phenyl ether
- chrysene
- dibenzo(a,h)anthracene
- 1,2-dichlorobenzene
- 1,3-dichlorobenzene
- 1,4-dichlorobenzene
- 3,3'-dichlorobenzidine
- diethyl phthalate
- dimethyl phthalate
- di-n-butyl phthalate
- 2,4-dinitrotoluene
- 2,6-dinitrotoluene
- di-n-octyl phthalate
- 1,2-diphenylhydrazine (as azobenzene)
- fluroanthene
- fluorene
- hexachlorobenzene
- hexachlorobutadiene
- hexachlorocyclopentadiene
- hexachloroethane
- indeno(1,2,3-cd)pyrene
- isophorone
- naphthalene
- nitrobenzene
- N-nitrosodimethylamine
- N-nitrosodi-n-propylamine
- N-nitrosodiphenylamine
- phenanthrene
- pyrene
- 1,2,4-trichlorobenzene

Table II—Organic Toxic Pollutants in Each of Four Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GS/MS)—Continued

Pesticides

- aldrin
- alpha-BHC
- beta-BHC
- gamma-BHC
- delta-BHC
- chlordane
- 4,4'-DDT
- 4,4'-DDE
- 4,4'-DDE
- dieldrin
- alpha-endosulfan
- beta-endosulfan
- endosulfan sulfate
- endrin
- endrin aldehyde
- heptachlor
- heptachlor epoxide
- PCB-1242
- PCB-1254
- PCB-1221
- PCB-1232
- PCB-1248
- PCB-1260
- PCB-1016
- toxaphene

Addendum A

Table III—Other Toxic Pollutants (Metals and Cyanide) and Total Phenols

- Antimony, Total
- Arsenic, Total
- Beryllium, Total
- Cadmium, Total
- Chromium, Total
- Copper, Total
- Lead, Total
- Mercury, Total
- Nickel, Total
- Selenium, Total
- Silver, Total
- Thallium, Total
- Zinc, Total
- Cyanide, Total
- Phenols, Total

ADDENDUM B—SECTION 313 WATER PRIORITY CHEMICALS.

CAS number	Common name
75-07-0	Acetaldehyde
75865	Acetane cynohydrin
107-02-8	Acrolein
107-13-1	Acrylonitrile
309-00-2	Aldrin [1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10, 10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha., 4.alpha.,4a.beta., 5.alpha.,8.alpha.,8a.beta.)-]
107-05-1	Allyl Chloride
7429-90-5	Aluminum (fume or dust)
7664-41-7	Ammonia
62-53-3	Aniline
120-12-7	Anthracene
7440-36-0	Antimony
7647189	Antimony pentachloride
28300745	Antimony potassium tartrate

ADDENDUM B—SECTION 313 WATER PRIORITY CHEMICALS.—Continued

CAS number	Common name
7789619	Antimony tribromide
10025919	Antimony trichloride
7783564	Antimony trifluoride
1309644	Antimony trioxide
7440-38-2	Arsenic
1303328	Arsenic disulfide
1303282	Arsenic pentoxide
7784341	Arsenic trichloride
1327533	Arsenic trioxide
1303339	Arsenic trisulfide
1332-21-4	Asbestos (friable)
542621	Barium cyanide
71-43-2	Benzene
92-87-5	Benzidine
100470	Benzonitrile
98-88-4	Benzoyl chloride
100-44-7	Benzyl chloride
7440-41-7	Beryllium
7787475	Beryllium chloride
7787497	Beryllium fluoride
7787555	Beryllium nitrate
111-44-4	Bis(2-chloroethyl) ether
75-25-2	Bromoform
74-83-9	Bromomethane (Methyl bromide)
85-68-7	Butyl benzyl phthalate
7440-43-9	Cadmium
543908	Cadmium acetate
7789426	Cadmium bromide
10108642	Cadmium chloride
7778441	Calcium arsenate
52740166	Calcium arsenite
13765190	Calcium chromate
592018	Calcium cyanide
133-06-2	Captan [1H-Isoindole-1,3(2H)-dione,3a,4,7,7a-tetrahydro-2-[(trichloromethyl)thio]-]
63-25-2	Carbaryl [1-Naphthalenol, methylcarbamate]
75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
57-74-9	Chlordane [4,7-Methanoindan.1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-]
7782-50-5	Chlorine
59-50-7	Chloro-4-methyl-3-phenol <i>p</i> -Chloro- <i>m</i> -cresol
108-90-7	Chlorobenzene
75-00-3	Chloroethane (Ethyl chloride)
67-66-3	Chloroform
74-87-3	Chloromethane (Methyl chloride)
95-57-8	2-Chlorophenol
106-48-9	4-Chlorophenol
1066304	Chromic acetate
11115745	Chromic acid
10101538	Chromic sulfate
7440-47-3	Chromium
1308-14-1	Chromium (Tri)
10049055	Chromous chloride
7789437	Cobaltous bromide
544183	Cobaltous formate
14017415	Cobaltous sulfamate
7440-50-8	Copper
108-39-4	<i>m</i> -Cresol
9548-7	<i>o</i> -Cresol
106-44-5	<i>p</i> -Cresol
1319-77-3	Cresol (mixed isomers)
142712	Cupric acetate
12002038	Cupric acetoarsenite
7447394	Cupric chloride
3251238	Cupric nitrate
5893663	Cupric oxalate
7758987	Cupric sulfate
10380297	Cupric sulfate, ammoniated
815827	Cupric tartrate
57-12-5	Cyanide
506774	Cyanogen chloride
110-82-7	Cyclohexane

ADDENDUM B—SECTION 313 WATER PRIORITY CHEMICALS.—Continued

CAS number	Common name
94-75-7	2,4-D [Acetic acid, (2,4-dichlorophenoxy)-]
106-93-4	1,2-Dibromoethane (Ethylene dibromide)
84-74-2	Dibutyl phthalate
25321-22-6	Dichlorobenzene (mixed isomers)
95-50-1	1,2-Dichlorobenzene
541-73-1	1,3-Dichlorobenzene
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
75-27-4	Dichlorobromomethane
107-06-2	1,2-Dichloroethane (Ethylene dichloride)
540-59-0	1,2-Dichloroethylene
120-83-2	2,4-Dichlorophenol
78-87-5	1,2-Dichloropropane
542-75-6	1,3-Dichloropropylene
62-73-7	Dichlorvos [Phosphoric acid, 2,2-dichloroethenyl dimethyl ester]
115-32-2	Dicofol [Benzenemethanol, 4-chloro-.alpha.-(4-chlorophenyl)-.alpha.-(trichloromethyl)-]
177-81-7	Di-(2-ethylhexyl phthalate (DEHP)
84-66-2	Diethyl phthalate
105-67-9	2,4-Dimethylphenol
131-11-3	Dimethyl phthalate
534-52-1	4,6-Dinitro- <i>o</i> -cresol
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
606-20-2	2,6-Dinitrotoluene
117-84-0	<i>n</i> -Diocetyl phthalate
122-66-7	1,2-Diphenylhydrazine (Hydrazobenzene)
106-89-8	Epichlorohydrin
100-41-4	Ethylbenzene
106934	Ethylene dibromide
50-00-0	Formaldehyde
76-44-8	Heptachlor [1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene]
118-74-1	Hexachlorobenzene
87-68-3	Hexachloro-1,3-butadiene
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane
7647-01-0	Hydrochloric acid
74-90-8	Hydrogen cyanide
7664-39-3	Hydrogen fluoride
7439-92-1	Lead
301042	Lead acetate
7784409	Lead arsenate
7645252	Do.
10102484	Do.
7758954	Lead chloride
13814965	Lead fluoborate
7783462	Lead fluoride
10101630	Lead iodide
10099748	Lead nitrate
7428480	Lead stearate
1072351	Do.
52652592	Do.
7446142	Lead sulfate
1314870	Lead sulfide
592870	Lead thiocyanate
58-89-9	Lindane [Cyclohexane, 1,2,3,4,5,6-hexachloro-(1.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-]
14307358	Lithium chromate
108-31-6	Maleic anhydride
592041	Mercuric cyanide
10045940	Mercuric nitrate
7783359	Mercuric sulfate
592858	Mercuric thiocyanate
7782867	Mercurous nitrate
7439-97-6	Mercury
72-43-5	Methoxychlor [Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-]]
80-62-6	Methyl methacrylate
91-20-3	Naphthalene
7440-02-0	Nickel
15699180	Nickel ammonium sulfate
37211055	Nickel chloride
7718549	Do.
12054487	Nickel hydroxide

ADDENDUM B—SECTION 313 WATER PRIORITY CHEMICALS.—Continued

CAS number	Common name
14216752	Nickel nitrate
7786814	Nickel sulfate
7697-37-2	Nitric acid
98-95-3	Nitrobenzene
88-75-5	2-Nitrophenol
100-02-7	4-Nitrophenol
62-75-9	<i>N</i> -Nitrosodimethylamine
86-30-6	<i>N</i> -Nitrosodiphenylamine
621-64-7	<i>N</i> -Nitrosodi- <i>n</i> -propylamine
56-38-2	Parathion [Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester]
87-86-5	Pentachlorophenol (PCP)
108-95-2	Phenol
75-44-5	Phosgene
7664-38-2	Phosphoric acid
7723-14-0	Phosphorus (yellow or white)
1336-36-3	Polychlorinated biphenyls (PCBs)
7784410	Potassium arsenate
10124502	Potassium arsenite
7778509	Potassium bichromate
7789006	Potassium chromate
151508	Potassium cyanide
75-56-9	Propylene oxide
91-22-5	Quinoline
7782-49-2	Selenium
7446084	Selenium oxide
7440-22-4	Silver
7761888	Silver nitrate
7631892	Sodium arsenate
7784465	Sodium arsenite
10588019	Sodium bichromate
7775113	Sodium chromate
143339	Sodium cyanide
10102188	Sodium selenite
7782823	Do.
7789062	Strontium chromate
100-42-5	Styrene
7664-93-9	Sulfuric acid
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethylene (Perchloroethylene)
935-95-5	2,3,5,6-Tetrachlorophenol
78002	Tetraethyl lead
7440-28-0	Thallium
10031591	Thallium sulfate
108-88-3	Toluene
8001-35-2	Toxaphene
52-68-6	Trichlorfon [Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-dimethylester]
120-28-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
7440-62-2	Vanadium (fume or dust)
108-05-4	Vinyl acetate
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride
108-38-3	<i>m</i> -Xylene
95-47-6	<i>o</i> -Xylene
106-42-3	<i>p</i> -Xylene
1330-20-7	Xylene (mixed isomers)
7440-66-6	Zinc (fume or dust)
557346	Zinc acetate
14639975	Zinc ammonium chloride
14639986	Do.
52628258	Do.
1332076	Zinc borate
7699458	Zinc bromide
3486359	Zinc carbonate
7646857	Zinc chloride
557211	Zinc cyanide
7783495	Zinc fluoride

ADDENDUM B—SECTION 313 WATER PRIORITY CHEMICALS.—Continued

CAS number	Common name
557415	Zinc formate
7779864	Zinc hydrosulfite
7779886	Zinc nitrate
127822	Zinc phenolsulfonate
1314847	Zinc phosphide
16871719	Zinc silicofluoride
7733020	Zinc sulfate

Addendum C

Large and Medium Municipal Separate Storm
Sewer Systems

BILLING CODE 6560-50-M

Addendum C

State	Large and Medium Municipalities Located in the Non-Delegated States (Including Colorado, Delaware and Washington because they do not have Federal Facility permitting authority)		
AK	Anchorage		
AZ	Mesa Phoenix Pima County Tempe Tucson		
FL	Apopka Atlantis Bal Harbor Village Bay Harbour Island Bay Lake Belle Glade Belle Isle Belleair Belleair Beach Belleair Bluffs Belleair Shore Biscayne Park Boca Raton Boynton Beach Briny Breezes Broward County Century Clearwater Cloud Lake Coconut Creek Cooper City Coral Gables Coral Springs Dade County Dania	Davie Deerfield Beach Delray Beach Duvall Eatonville Edgewood El Portal Escambia County Florida City Ft. Lauderdale Glen Ridge Golden Beach Golf Village Golfview Greenacres City Gulf Stream Hacienda Village Hallandale Haverville Hialeah Hialeah Gardens Highland Beach Hillsboro Beach Hillsborough County Hollywood	Homestead Hypoluxo Indian Creek Village Islandia Jacksonville Juno Beach Jupiter Lake Buena Vista Lake Clark Shores Lake Park Lake Worth Lantana Lauderdale-by-the-Sea Lauderdale Lakes Lauderhill Lazy Lake Village Lighthouse Point Maitland Mangonia Park Margate Medley Miami Miami Beach Miami Shores Miami Springs


Addendum C

State	Large and Medium Municipalities Located in the Non-Delegated States (Including Colorado, Delaware and Washington because they do not have Federal Facility permitting authority)		
FL (Cont.)	Miramar North Bay North Miami North Miami Beach North Lauderdale Oakland Oakland Park Ocean Ridge Ocoee Opa-Locka Orange County Orlando Pahokee Palm Beach Palm Beach Gardens Palm Beach Shores	Palm Springs Parkland Pembroke Park Pembroke Pines Pennsuco Pensacola Pinellas Plantation Plant City Polk Pompano Beach Riviera Beach Royal Palm Beach Sarasota Sea Ranch Lakes South Bay	South Miami South Palm Beach Sunrise Surfside Sweetwater Tamarac Tampa Temple Terrace Tequesta Village Virginia Gardens Walton Manor West Miami West Palm Beach Windermere Winter Gardens Winter Park
ID	Boise City		
LA	Baton Rouge Jefferson County New Orleans Shreveport		
MA	Boston Lowell Springfield Worcester		
ME			
NH			
NM	Albuquerque		
OK	Oklahoma City Tulsa		

Addendum C

State	Large and Medium Municipalities Located in the Non-Delegated States (Including Colorado, Delaware and Washington because they do not have Federal Facility permitting authority)		
SD			
TX	Abilene Amarillo Arlington Austin Beaumont Corpus Christi Dallas	El Paso Fort Worth Garland Harris County Houston Irving Laredo	Lubbock Mesquite Pasadena Plano San Antonio Waco
CO	Aurora Colorado Springs Denver Lakewood Pueblo		
DE	New Castle County		
WA	King County Pierce County Seattle Snohomish County Spokane Tacoma		

APPENDIX C—Notice of Intent and Instructions

See Reverse for Instructions		Form Approved. OMB No. 2040-0048 Approval expires: 8-31-95
NPDES FORM		United States Environmental Protection Agency Washington, DC 20460 Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity Under the NPDES General Permit
<p>Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a NPDES permit issued for storm water discharges associated with industrial activity in the State identified in Section II of this form. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.</p>		
I. Facility Operator Information		
Name: _____		Phone: _____
Address: _____		Status of Owner/Operator: <input type="checkbox"/>
City: _____	State: _____	ZIP Code: _____
II. Facility/Site Location Information		
Name: _____		Is the Facility Located on Indian Lands? (Y or N) <input type="checkbox"/>
Address: _____		
City: _____	State: _____	ZIP Code: _____
Latitude: _____	Longitude: _____	Quarter: _____ Section: _____ Township: _____ Range: _____
III. Site Activity Information		
MS4 Operator Name: _____		
Receiving Water Body: _____		
If You are Filing as a Co-permittee, Enter Storm Water General Permit Number: _____		Are There Existing Quantitative Data? (Y or N) <input type="checkbox"/> Is the Facility Required to Submit Monitoring Data? (1, 2, or 3) <input type="checkbox"/>
SIC or Designated Activity Code: _____	Primary: _____	2nd: _____ 3rd: _____ 4th: _____
If This Facility is a Member of a Group Application, Enter Group Application Number: _____		
If You Have Other Existing NPDES Permits, Enter Permit Numbers: _____		
IV. Additional Information Required for Construction Activities Only		
Project Start Date: _____	Completion Date: _____	Estimated Area to be Disturbed (in Acres): _____
		Is the Storm Water Pollution Prevention Plan in Compliance with State and/or Local Sediment and Erosion Plans? (Y or N) <input type="checkbox"/>
V. Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Print Name: _____		Date: _____
Signature: _____		

Instructions - EPA Form 3510-6
 Notice Of Intent (NOI) For Storm Water Discharges Associated With Industrial Activity
 To Be Covered Under The NPDES General Permit

Who Must File A Notice Of Intent (NOI) Form

Federal law at 40 CFR Part 122 prohibits point source discharges of storm water associated with industrial activity to a water body(ies) of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. The operator of an industrial activity that has such a storm water discharge must submit a NOI to obtain coverage under the NPDES Storm Water General Permit. If you have questions about whether you need a permit under the NPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a state agency, contact the Storm Water Hotline at (703) 821-4823.

Where To File NOI Form

NOIs must be sent to the following address:

Storm Water Notice of Intent
 PO Box 1215
 Newington, VA 22122

Completing The Form

You must type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, call the Storm Water Hotline at (703) 821-4823.

Section I Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Enter the appropriate letter to indicate the legal status of the operator of the facility.

F = Federal M = Public (other than federal or state)
 S = State P = Private

Section II Facility/Site Location Information

Enter the facility's or site's official or legal name and complete street address, including city, state, and ZIP code. If the facility or site lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Indicate whether the facility is located on Indian lands.

Section III Site Activity Information

If the storm water discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name) and the receiving water of the discharge from the MS4. (A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body which is designed or used for collecting or conveying storm water.)

If the facility discharges storm water directly to receiving water(s), enter the name of the receiving water.

If you are filing as a co-permittee and a storm water general permit number has been issued, enter that number in the space provided.

Indicate whether or not the owner or operator of the facility has existing quantitative data that represent the characteristics and concentration of pollutants in storm water discharges.

Indicate whether the facility is required to submit monitoring data by entering one of the following:

- 1 = Not required to submit monitoring data;
- 2 = Required to submit monitoring data;
- 3 = Not required to submit monitoring data; submitting certification for monitoring exclusion

Those facilities that must submit monitoring data (e.g., choice 2) are: Section 313 EPCRA facilities; primary metal industries; land disposal units/incinerators/BIFs; wood treatment facilities; facilities with coal pile runoff; and, battery reclaimers.

List in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility or site identified in Section II of this application.

For industrial activities defined in 40 CFR 122.26(b)(14)(i)-(xi) that do not have SIC codes that accurately describe the principal products produced or services provided, the following 2-character codes are to be used:

- HZ = Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA [40 CFR 122.26 (b)(14)(iv)];
- LF = Landfills, land application sites, and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under subtitle D of RCRA [40 CFR 122.26 (b)(14)(v)];
- SE = Steam electric power generating facilities, including coal handling sites [40 CFR 122.26 (b)(14)(vi)];
- TW = Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage [40 CFR 122.26 (b)(14)(ix)]; or,
- CO = Construction activities [40 CFR 122.26 (b)(14)(x)].

If the facility listed in Section II has participated in Part 1 of an approved storm water group application and a group number has been assigned, enter the group application number in the space provided.

If there are other NPDES permits presently issued for the facility or site listed in Section II, list the permit numbers. If an application for the facility has been submitted but no permit number has been assigned, enter the application number.

Section IV Additional Information Required for Construction Activities Only

Construction activities must complete Section IV in addition to Sections I through III. Only construction activities need to complete Section IV.

Enter the project start date and the estimated completion date for the entire development plan.

Provide an estimate of the total number of acres of the site on which soil will be disturbed (round to the nearest acre).

Indicate whether the storm water pollution prevention plan for the site is in compliance with approved state and/or local sediment and erosion plans, permits, or storm water management plans.

Section V Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

APPENDIX D—Notice of Termination and Instructions

Form Approved. OMB No. 2040-0088
Approval expires: 8-31-95

Please See Instructions Before Completing This Form

NPDES
FORM



United States Environmental Protection Agency
Washington, DC 20460

Notice of Termination (NOT) of Coverage Under the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the NPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. Permit Information

NPDES Storm Water General Permit Number: _____

Check Here if You are No Longer the Operator of the Facility:

Check Here if the Storm Water Discharge is Being Terminated:

II. Facility Operator Information

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

III. Facility/Site Location Information

Name: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Latitude: _____ Longitude: _____ Quarter: _____ Section: _____ Township: _____ Range: _____

IV. Certification: I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

Print Name: _____ Date: _____

Signature: _____

Instructions for Completing Notice of Termination (NOT) Form

Who May File a Notice of Termination (NOT) Form

Permittees who are presently covered under the EPA issued National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any storm water discharges associated with industrial activity as defined in the storm water regulations at 40 CFR 122.26 (b)(14), or when they are no longer the operator of the facilities.

For construction activities, elimination of all storm water discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with industrial activity from the construction site that are authorized by a NPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpeaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

Where to File NOT Form

Send this form to the the following address:

Storm Water Notice of Termination
P.O. Box 1185
Newington, VA 22122

Completing the Form

Type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, call the Storm Water Hotline at (703) 821-4823.

PLEASE SEE REVERSE OF THIS FORM FOR FURTHER INSTRUCTIONS

Instructions - EPA Form 3510-7
Notice of Termination (NOT) of Coverage Under The NPDES General Permit
for Storm Water Discharges Associated With Industrial Activity

Section I Permit Information

Enter the existing NPDES Storm Water General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, contact the Storm Water Hotline at (703) 821-4823.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box:

If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box.

If all storm water discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

[FR Doc. 92-21384 Filed 9-8-92; 8:45 am]
BILLING CODE 6560-50-C

Section IV Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

APPENDIX F

EPA Permit Application Forms 1, 2F,
NOI

NPDES
FORM



United States Environmental Protection Agency
Washington, DC 20460

Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity Under the NPDES General Permit

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a NPDES permit issued for storm water discharges associated with industrial activity in the State identified in Section II of this form. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. Facility Operator Information

Name: _____ Phone: _____
Address: _____ Status of Owner/Operator:
City: _____ State: _____ ZIP Code: _____

II. Facility/Site Location Information

Name: _____
Address: _____
City: _____ State: _____ ZIP Code: _____
Latitude: _____ Longitude: _____ Quarter: _____ Section: _____ Township: _____ Range: _____

Is the Facility Located on Indian Lands? (Y or N)

III. Site Activity Information

MS4 Operator Name: _____
Receiving Water Body: _____
If You are Filing as a Co-permittee, Enter Storm Water General Permit Number: _____ Are There Existing Quantitative Data? (Y or N) Is the Facility Required to Submit Monitoring Data? (1, 2, or 3)
SIC or Designated Activity Code: Primary: _____ 2nd: _____ 3rd: _____ 4th: _____
If This Facility is a Member of a Group Application, Enter Group Application Number: _____
If You Have Other Existing NPDES Permits, Enter Permit Numbers: _____

IV. Additional Information Required for Construction Activities Only

Project Start Date: _____ Completion Date: _____ Estimated Area to be Disturbed (in Acres): _____ Is the Storm Water Pollution Prevention Plan in Compliance with State and/or Local Sediment and Erosion Plans? (Y or N)

V. Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____ Date: _____

Signature: _____

Instructions - EPA Form 3510-6
Notice Of Intent (NOI) For Storm Water Discharges Associated With Industrial Activity
To Be Covered Under The NPDES General Permit

Who Must File A Notice Of Intent (NOI) Form

Federal law at 40 CFR Part 122 prohibits point source discharges of storm water associated with industrial activity to a water body(ies) of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. The operator of an industrial activity that has such a storm water discharge must submit a NOI to obtain coverage under the NPDES Storm Water General Permit. If you have questions about whether you need a permit under the NPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a state agency, contact the Storm Water Hotline at (703) 821-4823.

Where To File NOI Form

NOIs must be sent to the following address:

Storm Water Notice of Intent
PO Box 1215
Newington, VA 22122

Completing The Form

You must type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, call the Storm Water Hotline at (703) 821-4823.

Section I Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Enter the appropriate letter to indicate the legal status of the operator of the facility.

F = Federal M = Public (other than federal or state)
S = State P = Private

Section II Facility/Site Location Information

Enter the facility's or site's official or legal name and complete street address, including city, state, and ZIP code. If the facility or site lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Indicate whether the facility is located on Indian lands.

Section III Site Activity Information

If the storm water discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name) and the receiving water of the discharge from the MS4. (A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body which is designed or used for collecting or conveying storm water.)

If the facility discharges storm water directly to receiving water(s), enter the name of the receiving water.

If you are filing as a co-permittee and a storm water general permit number has been issued, enter that number in the space provided.

Indicate whether or not the owner or operator of the facility has existing quantitative data that represent the characteristics and concentration of pollutants in storm water discharges.

Indicate whether the facility is required to submit monitoring data by entering one of the following:

- 1 = Not required to submit monitoring data;
- 2 = Required to submit monitoring data;
- 3 = Not required to submit monitoring data; submitting certification for monitoring exclusion

Those facilities that must submit monitoring data (e.g., choice 2) are: Section 313 EPCRA facilities; primary metal industries; land disposal units/incinerators/BIFs; wood treatment facilities; facilities with coal pile runoff; and, battery reclaimers.

List, in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility or site identified in Section II of this application.

For industrial activities defined in 40 CFR 122.26(b)(14)(i)-(xi) that do not have SIC codes that accurately describe the principal products produced or services provided, the following 2-character codes are to be used:

- HZ = Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA [40 CFR 122.26 (b)(14)(iv)];
- LF = Landfills, land application sites, and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under subtitle D of RCRA [40 CFR 122.26 (b)(14)(v)];
- SE = Steam electric power generating facilities, including coal handling sites [40 CFR 122.26 (b)(14)(vii)];
- TW = Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling and reclamation of municipal or domestic sewage [40 CFR 122.26 (b)(14)(ix)]; or,
- CO = Construction activities [40 CFR 122.26 (b)(14)(x)].

If the facility listed in Section II has participated in Part 1 of an approved storm water group application and a group number has been assigned, enter the group application number in the space provided.

If there are other NPDES permits presently issued for the facility or site listed in Section II, list the permit numbers. If an application for the facility has been submitted but no permit number has been assigned, enter the application number.

Section IV Additional Information Required for Construction Activities Only

Construction activities must complete Section IV in addition to Sections I through III. Only construction activities need to complete Section IV.

Enter the project start date and the estimated completion date for the entire development plan.

Provide an estimate of the total number of acres of the site on which soil will be disturbed (round to the nearest acre).

Indicate whether the storm water pollution prevention plan for the site is in compliance with approved state and/or local sediment and erosion plans, permits, or storm water management plans.

Section V Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Branch PM-223, U.S. Environmental Protection Agency, 401 M Street, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Permits Division



Application Form 1 - General Information

Consolidated Permits Program

This form must be completed by all persons applying for a permit under EPA's Consolidated Permits Program. See the general instructions to Form 1 to determine which other application forms you will need.

U.S. ENVIRONMENTAL PROTECTION AGENCY
GENERAL INFORMATION
Consolidated Permits Program
(Read the "General Instructions" before starting.)

FORM 1 GENERAL **EPA**

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

I. EPA I.D. NUMBER

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (*the area to the left of the label space lists the information that should appear*), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X'			SPECIFIC QUESTIONS	MARK 'X'		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	16	17	18	B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)	19	20	21
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	22	23	24	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)	25	26	27
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	28	29	30	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	31	32	33
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	34	35	36	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	37	38	39
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	40	41	42	J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	43	44	45

III. NAME OF FACILITY

1 SKIP

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)

B. PHONE (area code & no.)

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

B. CITY OR TOWN

C. STATE

D. ZIP CODE

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

B. COUNTY NAME

C. CITY OR TOWN

D. STATE

E. ZIP CODE

F. COUNTY CODE (if known)

VII. SIC CODES (4-digit, in order of priority)

A. FIRST				B. SECOND			
C			(specify)	C			(specify)
7				7			
15	16	17	18	15	16	17	18
C. THIRD				D. FOURTH			
C			(specify)	C			(specify)
7				7			
15	16	17	18	15	16	17	18

VIII. OPERATOR INFORMATION

A. NAME												B. Is the name listed in Item VIII-A also the owner?	
C												<input type="checkbox"/> YES <input type="checkbox"/> NO 66	
8													
15	16												
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)										D. PHONE (area code & no.)			
F = FEDERAL M = PUBLIC (other than federal or state) S = STATE O = OTHER (specify)										(specify)			
										C A			
										15 16 - 18 19 - 21 22 - 23			
E. STREET OR P.O. BOX													
F. CITY OR TOWN													
G. STATE				H. ZIP CODE				IX. INDIAN LAND					
								Is the facility located on Indian lands?					
								<input type="checkbox"/> YES <input type="checkbox"/> NO 52					

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)						D. PSD (Air Emissions from Proposed Sources)					
C	T	I				C	T	I			
9	N					9	P				
15	16	17	18	19	30	15	16	17	18	19	30
B. UIC (Underground Injection of Fluids)						E. OTHER (specify)					
C	T	I				C	T	I	(specify)		
9	U					9					
15	16	17	18	19	30	15	16	17	18	19	30
C. RCRA (Hazardous Wastes)						E. OTHER (specify)					
C	T	I				C	T	I	(specify)		
9	R					9					
15	16	17	18	19	30	15	16	17	18	19	30

XI. MAP
 Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED

COMMENTS FOR OFFICIAL USE ONLY

C											
15	16										

DESCRIPTION OF CONSOLIDATED
PERMIT APPLICATION FORMS

FORM 1 PACKAGE
TABLE OF CONTENTS

The Consolidated Permit Application Forms are:

- Form 1 — General Information (*included in this part*);
- Form 2 — Discharges to Surface Water (*NPDES Permits*):
 - 2A. Publicly Owned Treatment Works (*Reserved — not included in this package*),
 - 2B. Concentrated Animal Feeding Operations and Aquatic Animal Production Facilities (*not included in this package*),
 - 2C. Existing Manufacturing, Commercial, Mining, and Silvicultural Operations (*not included in this package*), and
 - 2D. New Manufacturing, Commercial, Mining, and Silvicultural Operations (*Reserved — not included in this package*);
- Form 3 — Hazardous Waste Application Form (*RCRA Permits — not included in this package*);
- Form 4 — Underground Injection of Fluids (*UIC Permits — Reserved — not included in this package*); and
- Form 5 — Air Emissions in Attainment Areas (*PSD Permits — Reserved — not included in this package*).

- Section A. General Instructions
- Section B. Instructions for Form 1
- Section C. Activities Which Do Not Require Permits
- Section D. Glossary
- Form 1 (*two copies*)

SECTION A — GENERAL INSTRUCTIONS

Who Must Apply

With the exceptions described in Section C of these instructions, Federal laws prohibit you from conducting any of the following activities without a permit.

NPDES (*National Pollutant Discharge Elimination System Under the Clean Water Act, 33 U.S.C. 1251*). Discharge of pollutants into the waters of the United States.

RCRA (*Resource Conservation and Recovery Act, 42 U.S.C. 6901*). Treatment, storage, or disposal of hazardous wastes.

UIC (*Underground Injection Control Under the Safe Drinking Water Act, 42 U.S.C. 300f*). Injection of fluids underground by gravity flow or pumping.

PSD (*Prevention of Significant Deterioration Under the Clean Air Act, 72 U.S.C. 7401*). Emission of an air pollutant by a new or modified facility in or near an area which has attained the National Ambient Air Quality Standards for that pollutant.

Each of the above permit programs is operated in any particular State by either the United States Environmental Protection Agency (EPA) or by an approved State agency. You must use this application form to apply for a permit for those programs administered by EPA. For those programs administered by approved States, contact the State environmental agency for the proper forms.

If you have any questions about whether you need a permit under any of the above programs, or if you need information as to whether a particular program is administered by EPA or a State agency, or if you need to obtain application forms, contact your EPA Regional office (*listed in Table 1*).

Upon your request, and based upon information supplied by you, EPA will determine whether you are required to obtain a permit for a particular facility. Be sure to contact EPA if you have a question, because Federal laws provide that you may be heavily penalized if you do not apply for a permit when a permit is required.

Form 1 of the EPA consolidated application forms collects general information applying to all programs. You must fill out Form 1 regardless of which permit you are applying for. In addition, you must fill out one of the supplementary forms (*Forms 2 — 5*) for each permit needed under each of the above programs. Item II of Form 1 will guide you to the appropriate supplementary forms.

You should note that there are certain exclusions to the permit requirements listed above. The exclusions are described in detail in Section C of these instructions. If your activities are excluded from permit requirements then you do not need to complete and return any forms.

NOTE: Certain activities not listed above also are subject to EPA administered environmental permit requirements. These include permits for ocean dumping, dredged or fill material discharging, and certain types of air emissions. Contact your EPA Regional office for further information.

Table 1. Addresses of EPA Regional Contacts and States Within the Regional Office Jurisdictions

REGION I

Permit Contact, Environmental and Economic Impact Office, U.S. Environmental Protection Agency, John F. Kennedy Building, Boston, Massachusetts 02203, (617) 223-4635, FTS 223-4635.
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

REGION II

Permit Contact, Permits Administration Branch, Room 432, U.S. Environmental Protection Agency, 26 Federal Plaza, New York, New York 10007, (212) 264-9880, FTS 264-9880.
New Jersey, New York, Virgin Islands, and Puerto Rico.

REGION III

Permit Contact (*3 EN 23*), U.S. Environmental Protection Agency, 6th & Walnut Streets, Philadelphia, Pennsylvania 19106, (215) 597-8816, FTS 597-8816.
Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

REGION IV

Permit Contact, Permits Section, U.S. Environmental Protection Agency, 345 Courtland Street, N.E., Atlanta, Georgia 30365, (404) 881-2017, FTS 257-2017.
Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

REGION V

Permit Contact (*5EP*), U.S. Environmental Protection Agency, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 353-2105, FTS 353-2105.
Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Table 1 (continued)

REGION VI

Permit Contact (6AEP), U.S. Environmental Protection Agency, First International Building, 1201 Elm Street, Dallas, Texas 75270, (214) 767-2765, FTS 729-2765.
Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

REGION VII

Permit Contact, Permits Branch, U.S. Environmental Protection Agency, 324 East 11th Street, Kansas City, Missouri 64106, (816) 758-5955, FTS 758-5955.
Iowa, Kansas, Missouri, and Nebraska.

REGION VIII

Permit Contact (8E-WE), Suite 103, U.S. Environmental Protection Agency, 1860 Lincoln Street, Denver, Colorado 80295, (303) 837-4901, FTS 327-4901.
Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

REGION IX

Permit Contact, Permits Branch (E-4), U.S. Environmental Protection Agency, 215 Fremont Street, San Francisco, California 94105, (415) 556-3450, FTS 556-3450.
Arizona, California, Hawaii, Nevada, Guam, American Samoa, and Trust Territories.

REGION X

Permit Contact (M/S 521), U.S. Environmental Protection Agency, 1200 6th Avenue, Seattle, Washington 98101, (206) 442-7176, FTS 399-7176.
Alaska, Idaho, Oregon, and Washington.

Where to File

The application forms should be mailed to the EPA Regional office whose Region includes the State in which the facility is located (see Table 1).

If the State in which the facility is located administers a Federal permit program under which you need a permit, you should contact the appropriate State agency for the correct forms. Your EPA Regional office (Table 1) can tell you to whom to apply and can provide the appropriate address and phone number.

When to File

Because of statutory requirements, the deadlines for filing applications vary according to the type of facility you operate and the type of permit you need. These deadlines are as follows:¹

Table 2. Filing Dates for Permits

FORM(permit)	WHEN TO FILE
2A(NPDES)	180 days before your present NPDES permit expires.
2B(NPDES)	180 days before your present NPDES permit expires ² , or 180 days prior to startup if you are a new facility.
2C(NPDES)	180 days before your present NPDES permit expires ² .
2D(NPDES)	180 days prior to startup.
3(Hazardous Waste)	Existing facility: Six months following publication of regulations listing hazardous wastes. New facility: 180 days before commencing physical construction.

Table 2 (continued)

4(UIC) A reasonable time prior to construction for new wells; as directed by the Director for existing wells.
5(PSD) Prior to commencement of construction.

¹Please note that some of these forms are not yet available for use and are listed as "Reserved" at the beginning of these instructions. Contact your EPA Regional office for information on current application requirements and forms.

²If your present permit expires on or before November 30, 1980, the filing date is the date on which your permit expires. If your permit expires during the period December 1, 1980 - May 31, 1981, the filing date is 90 days before your permit expires.

Federal regulations provide that you may not begin to construct a new source in the NPDES program, a new hazardous waste management facility, a new injection well, or a facility covered by the PSD program before the issuance of a permit under the applicable program. Please note that if you are required to obtain a permit before beginning construction, as described above, you may need to submit your permit application well in advance of an applicable deadline listed in Table 2.

Fees

The U.S. EPA does not require a fee for applying for any permit under the consolidated permit programs. (However, some States which administer one or more of these programs require fees for the permits which they issue.)

Availability of Information to Public

Information contained in these application forms will, upon request, be made available to the public for inspection and copying. However, you may request confidential treatment for certain information which you submit on certain supplementary forms. The specific instructions for each supplementary form state what information on the form, if any, may be claimed as confidential and what procedures govern the claim. No information on Forms 1 and 2A through 2D may be claimed as confidential.

Completion of Forms

Unless otherwise specified in instructions to the forms, each item in each form must be answered. To indicate that each item has been considered, enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your facility or activity.

If you have previously submitted information to EPA or to an approved State agency which answers a question, you may either repeat the information in the space provided or attach a copy of the previous submission. Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

Financial Assistance for Pollution Control

There are a number of direct loans, loan guarantees, and grants available to firms and communities for pollution control expenditures. These are provided by the Small Business Administration, the Economic Development Administration, the Farmers Home Administration, and the Department of Housing and Urban Development. Each EPA Regional office (Table 1) has an economic assistance coordinator who can provide you with additional information.

EPA's construction grants program under Title II of the Clean Water Act is an additional source of assistance to publicly owned treatment works. Contact your EPA Regional office for details.

SECTION B – FORM 1 LINE-BY-LINE INSTRUCTIONS

This form must be completed by all applicants.

Completing This Form

Please type or print in the unshaded areas only. Some items have small graduation marks in the fill-in spaces. These marks indicate the number of characters that may be entered into our data system. The marks are spaced at 1/6" intervals which accommodate elite type (12 characters per inch). If you use another type you may ignore the marks. If you print, place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response.

Item I

Space is provided at the upper right hand corner of Form 1 for insertion of your EPA Identification Number. If you have an existing facility, enter your Identification Number. If you don't know your EPA Identification Number, please contact your EPA Regional office (Table 1), which will provide you with your number. If your facility is new (not yet constructed), leave this item blank.

Item II

Answer each question to determine which supplementary forms you need to fill out. Be sure to check the glossary in Section D of these instructions for the legal definitions of the bold faced words. Check Section C of these instructions to determine whether your activity is excluded from permit requirements.

If you answer "no" to every question, then you do not need a permit, and you do not need to complete and return any of these forms.

If you answer "yes" to any question, then you must complete and file the supplementary form by the deadline listed in Table 2 along with this form. (The applicable form number follows each question and is enclosed in parentheses.) You need not submit a supplementary form if you already have a permit under the appropriate Federal program, unless your permit is due to expire and you wish to renew your permit.

Questions (I) and (J) of Item II refer to major new or modified sources subject to Prevention of Significant Deterioration (PSD) requirements under the Clean Air Act. For the purpose of the PSD program, major sources are defined as: (A) Sources listed in Table 3 which have the potential to emit 100 tons or more per year emissions; and (B) All other sources with the potential to emit 250 tons or more per year. See Section C of these instructions for discussion of exclusions of certain modified sources.

Table 3. 28 Industrial Categories Listed in Section 169(1) of the Clean Air Act of 1977

- Fossil fuel-fired steam generators of more than 250 million BTU per hour heat input;
- Coal cleaning plants (with thermal dryers);
- Kraft pulp mills;
- Portland cement plants;
- Primary zinc smelters;
- Iron and steel mill plants;
- Primary aluminum ore reduction plants;
- Primary copper smelters;
- Municipal incinerators capable of charging more than 250 tons of refuse per day;
- Hydrofluoric acid plants;
- Nitric acid plants;
- Sulfuric acid plants;
- Petroleum refineries;
- Lime plants;
- Phosphate rock processing plants;
- Coke oven batteries;
- Sulfur recovery plants;
- Carbon black plants (furnace process);
- Primary lead smelters;
- Fuel conversion plants;
- Sintering plants;
- Secondary metal production plants;
- Chemical process plants;
- Fossil fuel boilers (or combination thereof) totaling more than 250 million BTU per hour heat input;

Table 3 (continued)

- Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- Taconite ore processing plants;
- Glass fiber processing plants; and
- Charcoal production plants.

Item III

Enter the facility's official or legal name. Do not use a colloquial name.

Item IV

Give the name, title, and work telephone number of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by reviewing offices if necessary.

Item V

Give the complete mailing address of the office where correspondence should be sent. This often is not the address used to designate the location of the facility or activity.

Item VI

Give the address or location of the facility identified in Item III of this form. If the facility lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or at intersection of Rts. 425 and 22).

Item VII

List, in descending order of significance, the four 4-digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the discharge, air emissions, or hazardous wastes.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Use the current edition of the manual. If you have any questions concerning the appropriate SIC code for your facility, contact your EPA Regional office (see Table 1).

Item VIII-A

Give the name, as it is legally referred to, of the person, firm, public organization, or any other entity which operates the facility described in this application. This may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager. Do not use a colloquial name.

Item VIII-B

Indicate whether the entity which operates the facility also owns it by marking the appropriate box.

Item VIII-C

Enter the appropriate letter to indicate the legal status of the operator of the facility. Indicate "public" for a facility solely owned by local government(s) such as a city, town, county, parish, etc.

Items VIII-D - H

Enter the telephone number and address of the operator identified in Item VIII-A.

Item IX

Indicate whether the facility is located on Indian Lands.

Item X

Give the number of each presently effective permit issued to the facility for each program or, if you have previously filed an application but have not yet received a permit, give the number of the application, if any. Fill in the unshaded area only. If you have more than one currently effective permit for your facility under a particular permit program, you may list additional permit numbers on a separate sheet of paper. List any relevant environmental Federal (e.g., permits under the Ocean Dumping Act, Section 404 of the Clean Water Act or the Surface Mining Control and Reclamation Act), State (e.g., State permits for new air emission sources in nonattainment areas under Part D of the Clean Air Act or State permits under Section 404 of the Clean Water Act), or local permits or applications under "other."

Item XI

Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

The legal boundaries of the facility;

The location and serial number of each of your existing and proposed intake and discharge structures;

All hazardous waste management facilities;

Each well where you inject fluids underground; and

All springs and surface water bodies in the area, plus all drinking water wells within 1/4 mile of the facility which are identified in the public record or otherwise known to you.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps of rivers, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7-1/2 minute series map published by the U.S. Geological Survey, which may be obtained through the U.S. Geological Survey Offices listed below. If a 7-1/2 minute series map has not been published for your facility site, then you may use a 15 minute series map from the U.S. Geological Survey. If neither a 7-1/2 nor 15 minute series map has been published for your facility site, use a plat map or other appropriate map, including all the requested information; in this case, briefly describe land uses in the map area (e.g., residential, commercial).

You may trace your map from a geological survey chart, or other map meeting the above specifications. If you do, your map should bear a note showing the number or title of the map or chart it was traced from. Include the names of nearby towns, water bodies, and other prominent points. An example of an acceptable location map is shown in Figure 1-1 of these instructions. (NOTE: Figure 1-1 is provided for purposes of illustration only, and does not represent any actual facility.)

U.S.G.S. OFFICES

AREA SERVED

Eastern Mapping Center
National Cartographic Information Center
U.S.G.S.
536 National Center
Reston, Va. 22092
Phone No. (703) 860-6336

Ala., Conn., Del., D.C., Fla., Ga., Ind., Ky., Maine, Md., Mass., N.H., N.J., N.Y., N.C., S.C., Ohio, Pa., Puerto Rico, R.I., Tenn., Vt., Va., W. Va., and Virgin Islands.

Item XI (continued)

Mid Continent Mapping Center
National Cartographic Information Center
U.S.G.S.
1400 Independence Road
Rolla, Mo. 65401
Phone No. (314) 341-0851

Ark., Ill., Iowa, Kans., La., Mich., Minn., Miss., Mo., N. Dak., Nebr., Okla., S. Dak., and Wis.

Rocky Mountain Mapping Center
National Cartographic Information Center
U.S.G.S.
Stop 504, Box 25046 Federal Center
Denver, Co. 80225
Phone No. (303) 234-2326

Alaska, Colo., Mont., N. Mex., Tex., Utah, and Wyo.

Western Mapping Center
National Cartographic Information Center
U.S.G.S.
345 Middlefield Road
Menlo Park, Ca. 94025
Phone No. (415) 323-8111

Ariz., Calif., Hawaii, Idaho, Nev., Oreg., Wash., American Samoa, Guam, and Trust Territories

Item XII

Briefly describe the nature of your business (e.g., products produced or services provided).

Item XIII

Federal statutes provide for severe penalties for submitting false information on this application form.

18 U.S.C. Section 1001 provides that "Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both."

Section 309(c)(2) of the Clean Water Act and Section 113(c)(2) of the Clean Air Act each provide that "Any person who knowingly makes any false statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of no more than \$10,000 or by imprisonment for not more than six months, or both."

In addition, Section 3008(d)(3) of the Resource Conservation and Recovery Act provides for a fine up to \$25,000 per day or imprisonment up to one year, or both, for a first conviction for making a false statement in any application under the Act, and for double these penalties upon subsequent convictions.

FEDERAL REGULATIONS REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

A. For a corporation, by a principal executive officer of at least the level of vice president. However, if the only activity in Item II which is marked "yes" is Question G, the officer may authorize a person having responsibility for the overall operations of the well or well field to sign the certification. In that case, the authorization must be written and submitted to the permitting authority.

B. For partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

C. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.

Continued from Page 2

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.
 Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E: Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3 or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below) No (go to Section IX)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

Yes (list all such pollutants below) No (go to Section IX)

IX. Contract Analysis Information

Were any of the analysis reported in item VII performed by a contract laboratory or consulting firm?

Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below) No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or print)	B. Area Code and Phone No.
C. Signature	D. Date Signed

Instructions - Form 2F

Application for Permit to Discharge Storm Water Associated with Industrial Activity

Who Must File Form 2F

Form 2F must be completed by operators of facilities which discharge storm water associated with industrial activity or by operators of storm water discharges that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.

Operators of discharges which are composed entirely of storm water must complete Form 2F (EPA Form 3510-2F) in conjunction with Form 1 (EPA Form 3510-1).

Operators of discharges of storm water which are combined with process wastewater (process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater) must complete and submit Form 2F, Form 1, and Form 2C (EPA Form 3510-2C).

Operators of discharges of storm water which are combined with nonprocess wastewater (nonprocess wastewater includes noncontact cooling water and sanitary wastes which are not regulated by effluent guidelines or a new source performance standard, except discharges by educational, medical, or commercial chemical laboratories) must complete Form 1, Form 2F, and Form 2E (EPA Form 3510-2E).

Operators of new sources or new discharges of storm water associated with industrial activity which will be combined with other nonstormwater new sources or new discharges must submit Form 1, Form 2F, and Form 2D (EPA Form 3510-2D).

Where to File Applications

The application forms should be sent to the EPA Regional Office which covers the State in which the facility is located. Form 2F must be used only when applying for permits in States where the NPDES permits program is administered by EPA. For facilities located in States which are approved to administer the NPDES permits program, the State environmental agency should be contacted for proper permit application forms and instructions.

Information on whether a particular program is administered by EPA or by a State agency can be obtained from your EPA Regional Office. Form 1, Table 1 of the "General Instructions" lists the addresses of EPA Regional Offices and the States within the jurisdiction of each Office.

Completeness

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

Public Availability of Submitted Information

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the Clean Water Act requires that all permit applications will be available to the public. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form, Form 1, or Form 2C you may claim as confidential, but claims for information which are effluent data will be denied.

If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

EPA ID Number

Fill in your EPA Identification Number at the top of each odd-numbered page of Form 2F. You may copy this number directly from item I of Form 1.

Item I

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

Item II-A

If you check "Yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing the same information.

Item II-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item III

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each storm water outfall;

paved areas and building within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive storm water discharges from the facility;

Item IV-A

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outfall. The site map required under item III can be used to estimate the total area drained by each outfall.

Item IV-B

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Significant materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Item IV-C

For each outfall, structural controls include structures which enclose material handling or storage areas, covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Nonstructural controls include practices such as spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures that are used to prevent or minimize the potential for releases of pollutants.

Item V

Provide a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by an NPDES permit. Tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test. All non-storm water discharges must be identified in a Form 2C or Form 2E which must accompany this application (see beginning of instructions under section titled "Who Must File Form 2F" for a description of when Form 2C and Form 2E must be submitted).

Item VI

Provide a description of existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years.

Item VII-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants addressed in Parts B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Parts B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent.

- A. **Sampling:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact EPA or your State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

Flow-Weighted Composite sample: A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in storm water treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including current quantitative data, if they determine it to be necessary to assess your discharges.

B. Reporting: All levels must be reported as concentration and mass (note: grab samples are reported in terms of concentration). You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if the separate sheets contain all the required information in a format which is constant with pages VII-1 and VII-2 in spacing and identification of pollutants and columns. Use the following abbreviations in the columns headed "Units."

Concentration		Mass	
ppm	parts per million	lbs	pounds
mg/l	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	milligrams
ug/l	micrograms per liter	g	grams
kg	kilograms	T	tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

(1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or

(2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or

(3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. If you measure only one grab sample and one flow-weighted composite sample for a given outfall, complete only the "Maximum Values" columns and insert "1" into the "Number of Storm Events Sampled" column. The permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Average Values" columns, and the total number of storm events sampled under the "Number of Storm Events Sampled" columns.

- C. **Analysis:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

Part VII-A

Part VII-A must be completed by all applicants for all outfalls who must complete Form 2F.

Analyze a grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General Instructions to Item VII for definitions of grab sample collected during the first thirty minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Part VII-B

List all pollutants that are limited in an effluent guideline which the facility is subject to (see 40 CFR Subchapter N to determine which pollutants are limited in effluent guidelines) or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See discussion in General instructions to item VII for definitions of grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Analyze a grab sample collected during the first thirty minutes of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results, except as provided in the General Instructions.

Part VII-C

Part VII-C must be completed by all applicants for all outfalls which discharge storm water associated with industrial activity, or that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard. Use both a grab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part C requires you to address the pollutants in Table 2F-2, 2F-3, and 2F-4 for each outfall. Pollutants in each of these Tables are addressed differently.

Table 2F-2: For each outfall, list all pollutants in Table 2F-2 that you know or have reason to believe are discharged (except pollutants previously listed in Part VII-B). If a pollutant is limited in an effluent guideline limitation which the facility is subject to, the pollutant must be analyzed and reported in Part VII-B. If a pollutant in Table 2F-2 is indirectly limited by an effluent guideline limitation through an indicator (e.g., use of TSS as an indicator to control the discharge of iron and aluminum), you must analyze for it and report the data in Part VII-B. For other pollutants listed in Table 2F-2 (those not limited directly or indirectly by an effluent limitation guideline), that you know or have reason to believe are discharged, you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Table 2F-3: For each outfall, list all pollutants in Table 2F-3 that you know or have reason to believe are discharged. For every pollutant in Table 2F-3 expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, you must submit quantitative data if any of these four pollutants is expected to be discharged

in concentrations of 100 ppb or greater. For every pollutant expected to be discharged in concentrations less than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Small Business Exemption - If you are a "small business," you are exempt from the reporting requirements for the organic toxic pollutants listed in Table 2F-3. There are two ways in which you can qualify as a "small business". If your facility is a coal mine, and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than \$100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980 = 100). This index is available in National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis).

Table 2F-4: For each outfall, list any pollutant in Table 2F-4 that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report them. **Note:** Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed at 40 CFR 177.21 or 40 CFR 302.4) may be exempted from the requirements of section 311 of CWA, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by:
 - a. An onsite treatment system separate from any treatment system treating your normal discharge;
 - b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
 - c. Any combination of the above.

See 40 CFR 117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table 1 on Form 1, Instructions), for further information on exclusions from section 311.

Part VII-D

If sampling is conducted during more than one storm event, you only need to report the information requested in Part VII-D for the storm event(s) which resulted in any maximum pollutant concentration reported in Part VII-A, VII-B, or VII-C.

Provide flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

Part VII-E

List any toxic pollutant listed in Tables 2F-2, 2F-3, or 2F-4 which you currently use or manufacture as an intermediate or final product or byproduct. In addition, if you know or have reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 2,4,5-trichlorophenoxy acetic

acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnell); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); then list TCDD. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VIII

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

Item X

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(4) of the Clean Water Act provides that "Any person who knowingly makes any false material statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction of such person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both." 40 CFR Part 122.22 requires the certification to be signed as follows:

(A) For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under 122.22(a)(1)(ii) rather than to specific individuals.

(B) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(C) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

APPENDIX G

EPA Multi-Sector Permit Press
Package

STORM WATER

Multi-Sector General Permit

Press Package

November 10, 1993

Office of Wastewater Enforcement and Compliance



INDUSTRIES COVERED BY STORM WATER MULTISECTOR PERMIT

Sector #	Name	Permit Section	Fact Sheet Section
1	Timber Products Facilities	XI.A.	VIII.A.
2	Paper And Allied Products Manufacturing Facilities	XI.B.	VIII.B.
3 *	Chemical and Allied Products Manufacturing Facilities	XI.C.	VIII.C.
4 *	Asphalt Paving and Roofing Materials and Lubricant Manufacturers	XI.D.	VIII.D.
5 *	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	XI.E.	VIII.E.
6	Primary Metals Facilities	XI.F.	VIII.F.
7	Metal Mining (Ore Mining and Dressing) Facilities	XI.G.	VIII.G.
8	Coal Mines and Coal Mining-Related Facilities	XI.H.	VIII.H.
9	Oil and Gas Extraction Facilities	XI.I.	VIII.I.
10	Mineral Mining and Processing Facilities	XI.J.	VIII.J.
11 *	Hazardous Waste Treatment, Storage, or Disposal Facilities	XI.K.	VIII.K.
12 *	Landfills and Land Application Sites	XI.L.	VIII.L.
13 *	Automobile Salvage Yards	XI.M.	VIII.M.
14 *	Scrap and Waste Material Processing and Recycling Facilities	XI.N.	VIII.N.
15 *	Steam Electric Power Generating Facilities, Including Coal Handling Areas	XI.O.	VIII.O.
16 & 17 *	Motor Freight Transportation Facilities, Passenger Transportation Facilities, Rail Transportation Facilities, and United States Postal Service Transportation Facilities	XI.P.	VIII.P.
18 *	Water Transportation Facilities That Have Vehicle Maintenance Shops and/or Equipment Cleaning Operations	XI.Q.	VIII.Q.
19 *	Ship and Boat Building or Repairing Yards	XI.R.	VIII.R.
20 *	Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities	XI.S.	VIII.S.
22 *	Treatment Works	XI.T.	VIII.T.
23	Food and Kindred Products Facilities	XI.U.	VIII.U.
24	Textile Mills, Apparel, and Other Fabric Product Manufacturing Facilities	XI.V.	VIII.V.
25	Wood and Metal Furniture and Fixture Manufacturing Facilities	XI.W.	VIII.W.
26 *	Printing and Publishing Facilities	XI.X.	VIII.X.
27	Rubber, Miscellaneous Plastic Products and Miscellaneous Manufacturing Industries	XI.Y.	VIII.Y.
28	Leather Tanning and Finishing Facilities	XI.Z.	VIII.Z.
29 *	Fabricated Metal Products Industry	XI.AA.	VIII.AA.
30	Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery	XI.AB.	VIII.AB.
31	Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Equipment	XI.AC.	XI.AC.

* Sectors potentially applicable to Army installations

STORM WATER FACT SHEET

SUMMARY OF EPA'S DRAFT MULTI-SECTOR INDUSTRIAL STORM WATER GENERAL PERMIT

As required by the 1987 amendments to the Clean Water Act, in November 1990, EPA initiated the National Pollutant Discharge Elimination System (NPDES) storm water permitting program. Under the program, NPDES permits are required for all point source storm water discharges associated with industrial activity.

To provide flexibility for the regulated community in acquiring a storm water discharge permit, EPA developed three permit application options. Industries could submit an individual application, a group application, or a notice of intent for a general permit. Under the group application process, similar industrial facilities were allowed to group together and submit a single application for the development of a model storm water discharge permit. Approximately 700 groups covering 44,000 industrial facilities are in the group application process.

Using the group application information, EPA developed an industry-specific multi-sector storm water general permit. Group application information included descriptions of industrial activities, materials stored outdoors, best management practices and storm water sampling data. To develop the multi-sector permit, EPA divided the 44,000 facilities into 29 industrial sectors based on similar industrial activities. EPA incorporated the permit requirements for all 29 sectors into a single, storm water permit.

This draft permit is being public noticed in the Federal Register in the very near future for use by EPA. Once the multi-sector permit is published in the Federal Register, there will be a 90-day comment period after which the permit will be finalized and issued by EPA.

Highlights of the Multi-Sector Permit:

Where the permit will be used:

- This draft permit is being public noticed in the Federal Register for use by EPA in the 12 non-NPDES States and territories, for federal facilities in five states and for certain Federal Indian Reservations where EPA is the permitting authority.
- This permit will also be provided to authorized NPDES States as a model for their use.

How to Apply:

- Once the permit is public noticed, there will be a 90-day comment period after which the permit will be finalized.
- After the final multi-sector permit is issued, a notice of intent (NOI) must be submitted to gain coverage under the permit. Any industrial discharger described by one of the 29 sectors meeting the eligibility provisions of the permit may apply.
- Both group applicants and others.
- Exclusions:
 - unpermitted process wastewater,
 - combined storm water and unpermitted process wastewater,
 - Discharges not in compliance with:
 1. Endangered Species Act
 2. National Historic Preservation Act
 3. National Environmental Policy Act

Pollution Prevention Plans:

- The pollution prevention plan is the basic storm water control mechanism in the permit.
- Operators of all facilities covered by the multi-sector permit must prepare and implement a storm water pollution prevention plan to reduce contamination in storm water discharges from their site.
- The pollution prevention plan will be developed by each industrial facility to address conditions at their site using lists of industry-specific **BMPs and pollution prevention measures**. This provides flexibility and cost-effectiveness.
- Industry-specific pollution prevention requirements in the permit include such measures as:
 1. Lists of industry-specific BMPs and pollution prevention measures from which an industry can develop a pollution prevention plan that best addresses conditions on their site.
 2. Industry-specific requirements for identification of pollutant sources on a site map.
 3. BMP and pollution prevention measure performance objectives targeted to specific industrial activities or sources of contamination within each sector.
 4. Targeted inspections to identify and control storm water contaminant sources.
 5. Industry-specific schedules and mechanisms for tracking pollution prevention plan implementation.
 6. Industry-specific schedules for preventive maintenance of pollution controls.
 7. Additional pollution prevention training in some sectors.

EPCRA 313 Pollution Prevention Plan Requirements:

- **All EPCRA 313 reporting facilities are required to consider additional best management practices or controls for preventing and containing spills of TRI chemicals.**
- EPCRA 313 reporting facility additional pollution prevention plan requirements include:
 1. Minimize discharge of water priority chemicals
 2. Extra preventive maintenance and housekeeping
 3. Facility security
 4. Training
 5. Certification of pollution prevention plan
- Comments are being requested on extending the EPCRA 313 pollution prevention plan requirements to any facility that uses liquid chemicals.

Monitoring Provisions:

- The chemical monitoring provisions have been designed to give feedback to the industrial facility on the effectiveness of the pollution prevention plan and to provide an incentive to implement the most effective storm water pollution prevention measures feasible.
- Quarterly storm water grab samples are required for 17 high-priority sectors in the second and fourth year of the permit. No monitoring is required if the 2nd year results are below "benchmark" levels. Effective pollution prevention measures implemented in the first year may reduce pollutant levels to below the benchmarks.

- Visual examinations of the storm water discharge are also required to more frequently assess the effectiveness of a pollution prevention plan.
- Permittees can exercise a "no exposure" certification to eliminate any requirement to monitor. This alternative certification option requires the permittees to certify on an annual basis that they have no sources of contamination to storm water.
- Alternative monitoring approaches are presented in the fact sheet and comments are requested.
- Monitoring requirements for Emergency Planning and Community Right to Know Act (EPCRA) Title 313 Toxic Release Inventory (TRI) reporting facilities are not included in this permit.

Numeric Effluent Limitations:

- The permit incorporates storm water limitations from existing effluent limitations guidelines. These are for coal piles, cement manufacturing, asphalt emulsion manufacturing and allied chemicals manufacturing.

Deadlines:

- 90 days to submit an NOI after permit is issued.
- 48 hours after submittal of a complete NOI a facility has permit coverage.
- 270 days to develop and implement pollution prevention plan after permit is issued.
- As soon as possible, but no later than 3 years, to implement controls that require construction.

Enforceability:

- Failure to develop and fully implement a pollution prevention plan is an enforceable violation of an NPDES permit.

STORM WATER FACT SHEET
Notice of Intent (NOI) and
Notice of Termination (NOT) Requirements

General permits for storm water discharges associated with industrial activity require the submittal of an NOI prior to the authorization of such discharges (see 40 CFR 122.28(b)(2)(i), April 2, 1992, [57 FR 11394]).

Consistent with these regulatory requirements, facilities seeking authorization to discharge storm water under the multi-sector general permit developed from group applications must submit a NOI to their respective permitting authority. This may be an EPA Regional Office or a State water program office depending on the location of the facility.

The NOI is one page in length and requests basic site information including the facility operator's name, address and telephone number, the location of the facility, and SIC codes which describe the industrial activities being conducted. In addition, **applicants must indicate** for which permit they're applying.

The NOI also includes a certification statement requiring the operator to certify that they are in compliance with the applicable requirements of Endangered Species Act (ESA), the National Historic Preservation Act (NHPA) and National Environmental Policy (NEPA).

Discharges that have an impact on an endangered species and which do not have an ESA Section 10 incidental take permit are not eligible for coverage under the multi-sector permit.

→ Similarly, discharges that are subject to New Source Performance Standards, and are therefore subject to NEPA, that do not have a FONSI or completed EIS are ineligible for coverage.

Discharges that will not disturb a site that is listed or is eligible for listing in the National Historic Register may be covered by the multi-sector permit.

Applicants are authorized to discharge storm water in compliance with all applicable permit requirements 48 hours following the postmark date of the NOI form, unless otherwise notified by the permitting authority.

When the operator of a permitted facility has changed, or when all storm water discharges associated with industrial activity authorized under this permit have been eliminated, the operator of the facility may submit a Notice of Termination (NOT).

The purpose of submitting a NOT is to notify the permitting authority of the change in status of the facility. Submittal of a NOT does not, however, relieve the operator, or past operator, from liability under the Clean Water Act for subsequent storm water discharges associated with industrial activity from the site.

STORM WATER FACT SHEET
GENERAL POLLUTION PREVENTION PLAN REQUIREMENTS

The Pollution Prevention Plan is considered to be the most important requirement of the multi-sector permit. Each industrial facility covered by these permits must develop a plan, tailored to the site specific conditions, and designed with the goal to control the amount of pollutants in storm water discharged from the site. While each industry sector in the multi-sector permit has industry-specific requirements, there are a number of general requirements that pertain to all facilities regardless of the sector designation.

Pollution Prevention Team - Each facility will select a Pollution Prevention lead individual or Team on its staff and the Team will be responsible for developing and implementing the Plan.

Components for the Plan - Plans are required to contain a description of potential pollutant sources, and a description of the measures and controls to prevent or minimize pollution of storm water and a specific schedule with interim milestones as to when measures and controls will be implemented. The description of potential pollutant sources must include:

- A map of the facility indicating the areas which drain to each storm water discharge point
- An indication of the industrial activities which occur in each drainage area
- An assessment of the pollutants that are likely to be present in storm water
- A description of the likely source pollutants from the site
- An inventory of the materials which may be exposed to storm water
- The history of leaks and spills of toxic or hazardous materials for the last three years.

The measures and controls to prevent and minimize pollution of storm water must include:

- Good housekeeping or up keep of industrial areas exposed to storm water
- Preventative maintenance of storm water controls and other facility equipment
- Spill prevention and response procedures to minimize the potential for and the impact of spills
- Test all outfalls to insure that there are no cross connections (only storm water is discharged)
- Training of all employees on pollution prevention measures and controls and record keeping.

The permit also requires that facilities:

- Identify areas with a high potential for erosion and the stabilization measures or structural controls to be used to limit erosion.
- Implement traditional storm water management measures (oil/water separators, vegetative swales, detention ponds, etc.) where they are appropriate for the site.

Inspection/Site Compliance Evaluation - Facility personnel must inspect the plant equipment and industrial areas on a regular basis. At least once every year a more thorough site compliance evaluation must be performed by facility personnel.

- Look for evidence of pollutants entering the drainage system
- Evaluate the performance of the pollution prevention measures
- Identify areas where the Plan should be revised to reduce the discharge of pollutants
- Document both the routine inspections and the annual site compliance evaluation in a report.

Consistency - The Plan can incorporate other plans which a facility may have already prepared for other permit including the Spill Prevention Control and Countermeasure (SPCC) Plans, or Best Management Practices (BMP) Programs.

Deadlines - The plan must be prepared and implemented within nine months after final permit issuance (where applicable, the construction of major structural controls must be completed within three years after final permit issuance.) The Plan must include a schedule of construction.

Signature - The Plan must be signed by a responsible corporate official such as the president, vice-president or general partner.

**STORM WATER FACT SHEET
SEVENTEEN MULTI-SECTOR PERMIT INDUSTRIAL SECTORS WHICH
CONDUCT CHEMICAL MONITORING**

<u>Sector #</u>	<u>Industry Name</u>
1	Timber Products Facilities
3	Chemicals and Allied Products Manufacturing Facilities
5	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
6	Primary Metals Facilities
7	Metal Mining (Ore Mining and Dressing) Facilities
11	Hazardous Waste Treatment, Storage, or Disposal Facilities
12	Landfills and Land Application Sites
13	Automobile Salvage Yards
14	Scrap and Waste Material Processing and Recycling Facilities
15	Steam electric Power Generating Facilities, including Coal Handling Areas
18	Water Transportation Facilities that have Vehicle Maintenance Shops and/or Equipment Cleaning Operations
19	Ship and Boat Building or Repairing Yards
20	Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas located at Air Transportation Facilities
22	Publicly Owned Treatment Works
23	Food and Kindred Products Facilities
28	Leather Tanning and Finishing Facilities
29	Fabricated Metals Products Industry

State Storm Water General Permits

[States with General Permit Authority (G.P.A.)*]

9/21/93

- Numbers indicate multiple permits.
- "General Industrial" includes baseline permits that cover a wide variety of facilities. "Other" includes all permits in the 11th category listed at 40 CFR 122.26(b)(14), plus permits that do not fall under another category.

	Manufacturing	Mining and Oil/Gas	Hazardous Waste	Landfills	Recycling	Elec. Gener. / Coal Handling	Transportation	Treatment Works	Construction	General Industrial	Other
Alabama	● 5	● 2		●	●		●		●		● 5
Arkansas									●	●	
California									●	● 2	
Colorado	●	● 3							●		●
Connecticut									●	●	
Delaware									●	●	
Georgia									●	●	
Hawaii									●	●	
Illinois									●	●	
Indiana									●	●	
Iowa									●	●	
Kentucky	● 3	●		●					●	●	●
Maryland									●	●	
Minnesota									●	●	
Mississippi	● 2	● 2		●					●	●	● 2
Missouri	● 2	● 2			●		● 3		● 4		●
Montana		●							●	●	
Nebraska									●	●	
Nevada		●							●	●	
New Jersey									●	●	
New York									●	●	
North Carolina	● 2	●		●	● 2		●	●	●		● 4
North Dakota		●							●	●	
Ohio									●	●	
Oregon	● 3	● 2		●	●		●	●	● 2		● 3
Pennsylvania									●	●	
Rhode Island									●	●	
South Carolina									●	●	
Tennessee									●	●	
Utah									●	●	
Vermont									⊖	⊖	
Virginia	●	●							●		● 2
Washington									← ● →		
West Virginia									← ● →		
Wisconsin									●	●	
Wyoming									●	●	

⊖ = Staff Draft

⊙ = Proposed Draft

● = Final Permit

* This list does not include States without NPDES Authority, nor does it include States that have NPDES Authority, but not G.P.A.

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**STORM WATER
GROUP APPLICATION
PART II DATA SUMMARY**

EPA developed the terms and conditions in the Multi-Sector Permit based primarily upon the information submitted in the group application process. A critical component was the sampling data provided by groups in Part 2 of their applications.

Application Requirements

- ▲ EPA's storm water group application (40 CFR 122.26) required groups to submit quantitative sampling data collected by a portion of their members. These facilities, referred to as the designated samplers in the group, were chosen as representative of the group's industrial activities, management practices and materials stored exposed to storm water.
- ▲ The groups were required to submit chemical sampling results for the following contaminants:
 - Oil and grease
 - Biochemical oxygen demand, 5-day (BOD5)
 - Chemical oxygen demand (COD)
 - Total suspended solids (TSS)
 - Total kjeldahl nitrogen (TKN)
 - Nitrate plus nitrite nitrogen
 - Total phosphorus
 - pH
 - Any pollutant listed in an effluent guideline to which a facility is subject
 - Any pollutant listed in a process wastewater permit to which the facility is subject
 - Any pollutant from a list of conventional, toxic and hazardous pollutants that the operator of the facility had reason to believe would be present in the discharge from the facility.
- ▲ Separate analyses were required for both a grab sample and a flow-weighted composite sample. Grab samples, only, were required for oil and grease and pH.

Data Received

- ▲ Sampling data was submitted for over 100 different pollutants in the storm water discharges.
- ▲ EPA entered the part 2 sampling data into a computer database.

Data Analysis

- ▲ EPA evaluated the part 2 data by grouping it into 29 industrial sectors. Facilities are classified within a sector based upon the SIC code or by the narrative description of their industrial activity. This allowed EPA to review data from several similar groups together.
- ▲ EPA calculated the mean, median, maximum, minimum, 95th percentile and 99th percentile for the pollutant data in each sector.

Results

- ▲ EPA identified pollutants of concern for the storm water discharges from the 29 industry sectors.
- ▲ EPA found ~~that~~ there were wide variations in pollutant concentrations among facilities within an industry sector and among the different industry sectors.
- ▲ Pollutant concentrations of greatest concern were generally found at industries with the most sources of contamination exposed to storm water.
- ▲ In general, suspended solids, which can also carry metals and organic pollutants, appear to be the pollutant with the highest concentrations.
- ▲ Chemical oxygen demand was found at relatively high concentrations in some industry sectors.
- ▲ Oil and grease concentrations were highly variable, but appeared highest in industrial sectors with transportation and vehicle and machinery maintenance.
- ▲ Metal concentrations were also variable, but appeared highest at industries that handle, process, manufacture, or mine metals and at landfills.
- ▲ Although highly variable from facility to facility, concentrations of some metals and toxic pollutants far exceeded EPA water quality criteria.
- ▲ EPA used the data to target pollution prevention plan, and monitoring requirements for the industry sector permit requirements.

EPA TECHNICAL GUIDANCE FOR STORM WATER DISCHARGERS

Available from the Storm Water Hotline (703) 821-4823 and the Office of Water Resource Center (202) 260-7786 (unless indicated otherwise)

GUIDANCE

Storm Water Discharges Associated with Industrial Activity

- Guidance Manual for the Preparation of NPDES Permit Applications for Storm Water Discharges Associated with Industrial Activity (EPA-505/8-91-002, April 1991).
 - Available from NTIS at 703/487-4650; Order number PB 92-199058 for \$35.
- Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (EPA-832-R-92-006, September 1992).
 - Available from NTIS at 703/487-4650; Order number PB 92-235969. Also available through the Education Resource Information Center/Clearinghouse at 614/292-6717; Order number 477N for \$26.75).
- Summary of Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (October 1992).
- Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices (EPA-832-R-92-005, September 1992).
 - Available from NTIS at 703/487-4650; Order number PB 92-235951 for \$35. Also available through the Education Resource Information Center/Clearinghouse at 614/292-6717; Order number 482N for \$22.50.
- Summary of Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices (October 1992).

Group Applications

- Additional Information on How to Complete a Group Application and Model Group Application (July 1991)
- Part 2 Industrial Storm Water Group Application Guidance (June 1992)

General

- Investigation of Inappropriate Pollutant Entries Into Storm Drainage Systems: A User's Guide (EPA/600/12-92-238, January 1993).
 - Available from the Center for Environmental Research Information at 513/569-7562.
- Manual of Practice Identification of Illicit Connections - Draft (EPA, September 1990)
- NPDES Storm Water Sampling Guidance Document (EPA 833-B-92-001, July 1992)
- Sediment and Erosion Control: An Inventory of Current Practices - Draft (EPA, OWEC, April 20, 1990)

PROGRAM SUMMARIES

- Overview of the Storm Water Program (October 1993)
- Question and Answer Document, Volumes 1 and 2 (March 1992 and September 1993)
- Raindrop Report (October 1993)

OTHER RESOURCES

- Environmental Impacts of Stormwater Discharges: A National Profile (EPA 841-R-92-001, June 1992)
- List of EPCRA (SARA Title III) Section 313 Water Priority Chemicals
- List of Reportable Quantities for Hazardous Substances Under CERCLA
- List of State and EPA Regional Storm Water Contacts (April 1993)
- Urban Runoff Management Information/Education Products Catalog (Version 1)
- Ninth Circuit United States Court of Appeals Opinion Regarding AMC v. EPA (May 27, 1992), and NRDC v. EPA (June 4, 1992)
 - Ninth Circuit Storm Water Decision Fact Sheet (September 3, 1992)
- Phase II Deadline Extension Fact Sheet (December 3, 1992)

EPA TECHNICAL GUIDANCE FOR STORM WATER DISCHARGERS

Available from the Storm Water Hotline (703) 821-4823 and the Office of Water Resource Center (202) 260-7786
(unless indicated otherwise)

OTHER RESOURCES (Contd.)

- State NPDES Program Status (August 1993)
- State Storm Water General Permits Status (September 1993)
- Typical Values of Annual Storm Events Statistics for Rain Zones of the United States ("Urban Targeting and BMP Selection," EPA Region V, November 1990)
- When It Rains, It Drains: What Everyone Should Know About Storm Water (EPA 832-F-93-002, August 1993)

NPDES FORMS

- Form 1 (general information)
- Form 2C (process wastewater discharges)
- Form 2D (new sources)
- Form 2E (non-process wastewater discharges)
- Form 2F (storm water discharges)
- Notice of Intent (NOI) - for EPA-issued storm water general permits
- Notice of Termination (NOT) - for EPA-issued storm water general permits

REGULATIONS/NOTICES

- November 16, 1990 Federal Register (55 FR 47990) - National Pollutant Discharge Elimination System (NPDES) Permit Application Requirements for Storm Water Discharges - Final Rule
 - Summary of November 16, 1990 Storm Water Application Rule
- March 21, 1991 Federal Register (56 FR 12098) - Application Deadline for Group Applications - Final Rule. Application Deadline for Individual Applications - Proposed Rule
- August 16, 1991 Federal Register (56 FR 40948) - NPDES General Permits and Reporting Requirements for Storm Water Discharges Associated with Industrial Activity - Proposed Rule
 - Summary of August 16, 1991 Storm Water Implementation Rule
 - August 16, 1991 Storm Water Implementation Rule Package Fact Sheet
- November 5, 1991 Federal Register (56 FR 50548) - Application Deadlines; Final Rule and Proposed Rule
- April 2, 1992 Federal Register (57 FR 11394) - Application Deadlines, General Permit Requirements and Reporting Requirements, Final Rule
 - April 2, 1992 Storm Water Program Rule Fact Sheet
- September 9, 1992 Federal Register (57 FR 41176) - Final NPDES General Permits for Storm Water Discharges from Construction Sites; Notice
- September 9, 1992 Federal Register (57 FR 41236) - Final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity; Notice
- September 9, 1992 Federal Register (57 FR 41344) - National Pollutant Discharge Elimination System. Request for Comment on Alternative Approaches for Phase II Storm Water Program; Proposed Rule
- September 25, 1992 Federal Register (57 FR 41236) - Final NPDES General Permits for Storm Water Discharges from Construction Sites; Notice
- September 25, 1992 Federal Register (57 FR 44438) - Final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity; Notice
- December 18, 1992, Federal Register (57 FR 60444) - Permit Issuance and Permit Compliance Deadlines for Phase I Dischargers; Final Rule
- April 14, 1993, Federal Register (58 FR 19427) - NPDES General Permit for Storm Water Discharges Associated with Industrial Activity Located in the Commonwealth of Puerto Rico - Notice

FACT SHEET
ORGANIZATION OF THE PERMIT/FACT SHEET

Fact Sheet

- The permit and fact sheet are organized into two segments. The fact sheet language appears first, followed by the permit condition.
- The permit contains both the general and industry specific requirements for all the industrial categories covered under the group process. The fact sheet portion of the proposal provides the corresponding rationale for the permit conditions.
- All industries must comply with the basic overall requirements identified in the first segment of both the permit and fact sheet such as eligibility for coverage, deadlines for pollution prevention plans and notification standard permit conditions and other generic requirements.

Permit

- The second segment of the permit contains the specific requirements for the 29 industrial categories represented under this permit. Each sector has its own chapter. These chapters outline and explain any additional or special requirements for each individual industrial category.
- Industries that have multiple industrial activities on-site are required to comply with the permit provisions provided in the applicable industrial categories.
- The final version of this permit will also include any special State requirements in accordance with Section 401 authority.
- The final version will include the notice of intent permit request form.
- As this is just a proposal, the last two items mentioned above are not included at this time.

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**NPDES-AUTHORIZED STATES
PRELIMINARY INFORMATION ON PROCESSING
OF GROUP APPLICATIONS FOR STORM WATER PERMITS**

**States That Will Not Use EPA's
Multi-Sector Permit:**

Alabama
California
Connecticut
Georgia
Indiana
Minnesota
Missouri
Montana
Nevada
Vermont
Washington
West Virginia
Wyoming

**States That May Use EPA's Multi-
Sector Permit as a Model (to develop
similar general permits or to modify
existing general permits):**

Arkansas
Colorado
Delaware
Hawaii
Illinois
Iowa
Kansas
Kentucky
Maryland
Michigan
Mississippi
Nebraska
New Jersey
New York
North Carolina
North Dakota
Ohio
Oregon
Pennsylvania
Rhode Island
South Carolina
Tennessee
Utah
Virgin Islands
Virginia
Wisconsin

October 7, 1993

◆ **FOR MORE
INFORMATION...**

- ◆ Group participants and interested members of the public should call the *EPA Storm Water Hotline* at (703) 821-4823.

STORM WATER

DISTRIBUTION OF FACILITIES PARTICIPATING IN GROUP APPLICATIONS

REGION	STATE	INDUSTRIAL SECTOR																				TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476

FORM WATER

DISTRIBUTION OF FACILITIES PARTICIPATING IN GROUP APPLICANTS

REGION	STATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	(TOTAL)				
SUBTOTAL NONDELEGATED	AR	61	25	8	16	26	10	6	4	10	11	17	19	16	16	17	16	10	6	6	20	22	75	74	74	74	74	74	74	74	74	74	74	74	74		
	LA	65	16	32	44	65	1	1	56	15	1	8	16	20	30	10	200	5	1	101	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	MS	4	1	3	17	5	1	11	6	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	OK	4	6	1	48	94	11	42	35	4	4	9	31	31	16	104	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	TX	144	35	67	43	515	54	140	213	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	NONDELEGATED	240	103	131	166	705	76	14	6	255	500	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	DELEGATED	183	76	113	153	678	66	14	6	246	268	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	VI	61	25	8	16	26	10	6	4	10	11	17	19	16	16	17	16	10	6	6	20	22	75	74	74	74	74	74	74	74	74	74	74	74	74	74	
	VII	3	15	14	66	165	11	4	32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	VIII	5	10	13	54	132	4	6	213	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
IX	4	3	7	17	26	6	3	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153	7	153
X	14	30	48	148	298	34	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
XI	10	30	48	148	298	34	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	14	30	48	148	298	34	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	10	15	8	32	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
DELEGATED	5	3	4	3	3	2	11	2	11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
DELEGATED	1	1	2	4	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
DELEGATED	2	2	2	4	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
DELEGATED	2	2	2	4	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DELEGATED	26	21	25	36	72	7	21	14	68	78	0	18	107	71	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	8	1	0	4	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	20	20	23	36	68	6	20	14	68	72	0	18	107	71	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DELEGATED	13	8	8	15	38	3	40	3	40	3	22	31	18	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
DELEGATED	6	10	38	9	15	16	3	14	2	2	7	10	2	26	2	26	2	26	2	26	2	26	2	26	2	26	2	26	2	26	2	26	2	26	2	26	
DELEGATED	5	1	3	1	2	2	7	10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
DELEGATED	5	1	3	1	2	2	7	10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
DELEGATED	24	16	46	57	65	18	63	20	20	2	24	24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
DELEGATED	13	6	5	16	30	3	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	11	12	41	12	24	16	29	16	2	2	7	34	8	31	0	232	18	5	109	6	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	221	4	1	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
DELEGATED	16	4	4	5	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
DELEGATED	13	6	7	7	11	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
DELEGATED	14	18	15	52	14	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
DELEGATED	264	26	27	76	54	13	12	1	10	63	1	14	11	36	6	1244	22	7	63	11	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	237	4	6	17	9	0	8	0	10	75	0	1	11	12	0	74	2	1	9	2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGATED	27	24	22	66	20	13	4	1	0	18	1	13	0	26	0	1170	20	6	43	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	2548	955	1021	2100	4670	675	153	306	370	2362	65	1030	1790	1551	157	12346	367	441	1541	876	2322	636	334	64	594	61	1173	851	74	64164	74	64164	74	64164			
NONDELEGATED	699	173	208	308	1106	80	63	6	262	605	11	146	438	363	99	2784	95	179	367	234	344	42	6	9	80	5	187	143	17	8631	17	8631	17	8631			
DELEGATED	1850	782	813	2462	3564	595	90	300	108	1757	74	884	1351	1188	58	10052	272	262	1144	642	1978	784	328	55	519	56	866	709	57	32993	57	32993	57	32993			

* Total does not include Military bases. Industrial activities at Military bases will open a number of industrial sectors.

* Denotes nondelegated State

Sector	Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate			
<p>Timber Products Facilities</p> <p>Wood preserving or surface protection facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: BOD, COD, TSS, arsenic, copper, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.</p>	<p>Wood preserving or surface protection facilities must collect semi-annual grab samples for the following parameters: Oil and grease, pH, COD, TSS, and conduct quarterly visual inspections of storm water discharges.</p> <p>Facilities that currently use or have used chlorophenolic formulations must collect semi-annual grab samples for the following parameter: Pentachlorophenol.</p> <p>Facilities that currently use or have used chlorophenolic formulations in the past and facilities that use cresotic formulations must collect semi-annual grab samples for the following parameter: Acute WET.</p> <p>Facilities that use chromium-copper-arsenic formulations must collect semi-annual grab samples for the following parameters: Arsenic, chromium, and copper.</p> <p>All covered facilities that are not wood preserving or wood surface protection facilities must collect semi-annual grab samples for the following parameters: BOD, COD, and TSS.</p>	<p>Site map: material handling; treatment, storage, disposal of water; liquid storage tanks; processing; treatment chemical storage; treated wood and residue storage; wet and dry decking; untreated wood and residue storage; treatment equipment storage.</p> <p>Inventory: facilities that have used chlorophenolic, cresotic, or inorganic formulations in the past must identify contaminated soils, equipment, and stored materials.</p> <ul style="list-style-type: none"> Identify parameters associated with pollutants. Identify specific BMPs for specific areas of site: good housekeeping measures to limit discharge of wood debris; minimize leachate from decaying wood; minimize dust generation. Periodic removal of debris from s.w. BMPs. Develop response schedules to limit tracking of spilled materials. Treatment chemicals must be cleaned up immediately. Develop BMPs for sediment and erosion control in specific areas of site. 	<p>NONE</p>	<ul style="list-style-type: none"> Material handling and unloading and loading areas daily with activity Processing and treated wood storage areas monthly for drippage on unprotected soils. Annually for specific areas of site. 	<ul style="list-style-type: none"> Discharges of boiler blowdown, water treatment, wastewater, rain-contact cooling waters, contact cooling waters, wash down waters from treatment equipment and s.w. that have come in contact with site areas where hand spraying of surface protection chemicals is performed are not authorized. Authorized non s.w. discharges include: discharges from spray down of lumber and wood product storage yards where no chemical additives are used in the spray water and no chemicals are applied to the wood during storage Baseline only imposes monitoring on wood treatment facilities.
<p>Resolving Facility Treatment Storage Disposal Facilities (TSDFs)</p>	<p>TSDFs must monitor semi-annually for the following parameters: ammonia, total recoverable magnesium, magnesium (dissolved), TKN, COD, TDS, TOL, oil and grease, pH, arsenic, barium, cadmium, lead, mercury, selenium, silver, and WET.</p>	<p>Specific pollutants of concern should be identified under risk identification.</p>	<p>NONE</p>	<ul style="list-style-type: none"> Inspect equipment and areas of facility at intervals specified. 	<ul style="list-style-type: none"> When a requirement under this section is similar to one under RCRA, the facility must comply with the more stringent of the two conditions.

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
Chemical and Allied Products Manufacturing	Chemical and allied product manufacturing facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: TKN, nitrate + nitrite as N, aluminum, ammonia, copper, iron, manganese, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.	Industrial inorganic chemical manufacturing facilities must collect semi-annual grab sample for the following parameters: Oil and grease, pH, COD, TSS, total chromium, hexavalent chromium, sulfate, and magnesium.	<ul style="list-style-type: none"> Site map: location of structures, total area of IA, specific IAs Identify parameters associated with pollutant sources Facilities must submit certification that the plan is complete 	<p>YES—limits on the "contaminated storm water" at phosphate fertilizer manufacturing facilities. Storm water limits are equivalent to 40 CFR 418.</p>	<ul style="list-style-type: none"> Comprehensive site evaluations 4x/yr BMPs 4x/yr All industrial areas exposed to precipitation 	<ul style="list-style-type: none"> Installation of rain gauge required
		Plastic materials and synthetic resin manufacturing facilities must collect semi-annual grab samples for the following parameters: oil and grease, pH, COD, TSS, phosphorus, copper, zinc, aluminum, chromium, lead, and nickel				
		Pharmaceutical products or medicinal chemical manufacturing facilities must submit monitoring data for Sections VII through X of Form 2F. EPA notes there were no facilities in this subsector.				
	Soap and detergent manufacturing facilities must collect semi-annual grab samples for the following parameters: BOD, COD, TSS, pH, oil and grease, and surfactants.	Paint, varnish, and lacquer manufacturing facilities must collect semi-annual grab samples for the following parameters: COD, TSS, oil and grease, lead, zinc, copper, chromium, xylene, and toluene.				
		Industrial organic chemical manufacturing facilities must collect semi-annual grab samples for the following parameters: COD, TSS, pH, oil and grease, total toxic organics, copper, lead, phenols, and zinc.				

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
		<p>Nitrogenous fertilizer manufacturing facilities must collect grab samples for the following parameters: BOD₅, TSS, pH, oil and grease, phosphorus, TKN, nitrate + nitrite as N, manganese, sulfate, and zinc.</p> <p>Adhesive, glass, and synthetic plastic material manufacturing facilities must collect semi-annual grab samples for the following parameters: COD, TSS, pH, oil and grease, zinc, and solvents.</p>				
<p>Asphalt Paving and Roofing Materials and Lubricant Manufacturers (Does not apply to petroleum refineries)</p>	<ul style="list-style-type: none"> Asphalt paving and roofing materials and lubricant manufacturing facilities must conduct quarterly visual examinations of storm water discharges. Asphalt paving and roofing emulsion manufacturing facilities must monitor their discharges annually for the presence of oil and grease, TSS and pH. 	<ul style="list-style-type: none"> Asphalt paving and roofing materials manufacturing facilities must collect annual grab samples for the following parameters: Oil and grease, TSS, COD, pH, and conduct quarterly visual examinations of storm water discharges. Lubricant manufacturing facilities must collect annual grab samples for the following parameters: COD, pH, oil and grease, and conduct annual visual inspections of storm water discharges. 	<ul style="list-style-type: none"> Comprehensive site evaluations - At least once at portable plants 	<p>Limits for storm water discharges from asphalt facilities. Same as 40 CFR 443 Subpart A.</p>	<ul style="list-style-type: none"> At least 1/month 	<p>Portable plants are covered by permit.</p>

Sector	Monitoring		PPP Requirements (Beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
<p>Clay, Clay, Concrete, Concrete, and Gypsum Product Manufacturing Facilities (Lime, asbestos, stone and mineral wool products are not covered because there were no groups from these industries)</p>	<p>Clay product manufacturing and concrete product manufacturing facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: TSS, aluminum, copper, iron, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.</p>	<p>Cement manufacturing facilities must collect semi-annual grab samples for the following parameters: Oil and grease, COD, TSS, pH, and conduct quarterly visual inspections of storm water discharges.</p>	<ul style="list-style-type: none"> Removal of spilled material in handling areas by sweeping or other equivalent measures Fine solids must be stored in areas not exposed to storm water Vehicle wash area must be reviewed to ensure washwater is not discharged with storm water 	<p>Numeric effluent limitations for runoff from storage piles at cement manufacturing facilities established under 40 CFR Part 411.37 are included: TSS ≤ 50 mg/L 6.0 ≤ pH ≤ 9.0</p>	<p>Monthly inspections while the facility is in operation</p>	<p>Difference from baseline: oil and grease not required to be monitored</p>
	<p>Cement manufacturing facilities must collect annual grab samples and analysis for TSS and pH.</p>	<p>Glass manufacturing facilities must conduct quarterly visual inspections of storm water discharges.</p> <p>All other facilities in this sector must collect annual grab samples for the following parameters: Oil and grease, COD, TSS, pH, any pollutant limited in an ELO, and conduct quarterly visual inspections of storm water discharges.</p>				
<p>Primary Metals Facilities</p>	<p>Primary metals facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: TKN, nitrate + nitrite as N, aluminum, ammonia, copper, iron, manganese, pyrene, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.</p>	<p>Primary metals facilities must collect semi-annual grab samples for the following parameters: Oil and grease, pH, TSS, metals, any pollutant limited in an ELO, acute WET, and conduct quarterly visual inspections of storm water discharges.</p>	<ul style="list-style-type: none"> Site map: identify locations of all emissions control equipment Significant materials should include areas of potential settling or deposition from particulate emissions Schedule preventative maintenance of all pollution control equipment Facilities which detect toxicity in their runoff must implement additional BMPs 	<p>NONE</p>	<ul style="list-style-type: none"> Monthly inspections of facility including pollution control equipment Annual comprehensive site compliance evaluations 	<p>Additional parameters required to be monitored under baseline include oil & grease, COD, TSS, pH, WET, lead, cadmium, arsenic, chromium, and any pollutant limited in an effluent guideline.</p>

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
<p>Coal Mines and Coal Mining Related Facilities (Discharges subject to 40 CFR 434 are not allowable. -Floor drains from maintenance buildings are excluded)</p>	<p>Coal mines and coal mining related facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Active coal mines and coal mining related facilities must collect an annual grab sample for the following parameter: Settled solids. Inactive facilities have no monitoring requirements.</p>	<p><u>Good housekeeping</u></p> <ul style="list-style-type: none"> • Sweeping or by road watering to keep dust down <p><u>Preventive maintenance</u></p> <ul style="list-style-type: none"> • Timely inspection • Periodic debris and sediment removed from BMP • Replacement of worn BMP <p><u>Sediment and erosion control</u></p> <ul style="list-style-type: none"> • Plan must contain all reasonable and appropriate SMCRA regulations • Location of vehicle maintenance/fueling stations • Pause/low maintenance treatment for reducing pollutants from inactive sites 	NONE	<ul style="list-style-type: none"> • Quarterly inspection for active sites and SMCRA inactive • Annual inspections of sediment and erosion control at active sites • Annual inspection for inactive sites • Inspections of coal exploration areas within the first month of activity, and each quarter thereafter • Inspection of inactive sites at least once every 3 years for remote and inaccessible inactive sites 	<p>Storm water discharges subject to 40 CFR 434 are covered.</p>
<p>Oil and Gas Extraction Facilities (Only for oil and gas facilities that have had and RQ release)</p>	<p>Oil and gas extraction facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Areas at oil and gas extraction facilities that have had an RQ release must collect annual grab samples for the following parameters: Oil and grease, TSS, COD, and detergents (MBAs). All other areas must collect semi-annual grab samples for the following parameters: Oil and grease, TSS, COD, and detergents (MBAs).</p>	<ul style="list-style-type: none"> • Describe measures to clean up RQ releases. 	No discharge of wastewater	<p>Semi-annual for all equipment and areas addressed in PPP.</p>	<p>These monitoring requirements are not imposed by the baseline.</p>
<p>Mineral Mining and Processing Facilities</p>	<p>Mineral mining and processing facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Mineral mining and processing facilities must collect quarterly grab samples for the following parameters: Phosphorus, pH, TSS, TDS, and conduct quarterly estimates of flows.</p>	<ul style="list-style-type: none"> • Site map monitoring points. • Other areas same as baseline. 	NONE	<ul style="list-style-type: none"> • Twice annually for active mines. • Quarterly visual inspections of all BMPs. • Annual inspections for inactive operations. 	<ul style="list-style-type: none"> • Baseline does not impose any monitoring on these types of facilities.

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
Landfills and Land Application Sites	Landfills and land application sites must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: TSS, total phosphorus, ammonia, iron, and lead. These facilities must conduct monthly visual examinations of storm water discharges.	Landfills and land application sites must collect semi-annual grab samples for the following parameters: TKN, COD, TDS, TOC, oil and grease, pH, magnesium (total recoverable and dissolved), TR arsenic, TR barium, TR cadmium, TR chromium, total cyanide, TR lead, total mercury, TR selenium, TR silver, and acute WET. These facilities must also collect quarterly grab samples for the following parameter: TSS.	<ul style="list-style-type: none"> - Must identify specific waste that have been disposed - Provide data on leachate generated at the site - Additional sources of pollutants must be identified under risk identification - Tracking system for waste disposed - Additional sediment and erosion control requirement 	NONE	<ul style="list-style-type: none"> - Inspections-weekly and within 24 hrs of a storm - Monthly inspections if stabilized on during arid seasons <p>Inactive landfills-biannually</p>	Leachate and runoff from open storage pit covered by this facility.
Automobile Salvage Yards	Automobile salvage yards must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: TSS, TKN, and nitrate + nitric as Nitrogen. These facilities must conduct monthly visual examinations of storm water discharges.	Automobile salvage yards must collect annual grab samples for the following parameters: Oil and grease, pH, COD, TSS, and conduct quarterly visual inspections of storm water discharges.	<ul style="list-style-type: none"> • Site map: monitoring points, total area of IA, specific IAs • Identify parameters associated with pollutant sources • Drain vehicles of fluids • Annual training on specified topics • Additional recordkeeping • Comprehensive site evaluations 2X/yr • Deadlines: <ul style="list-style-type: none"> - 3 months to develop plan - 6 months to implement plan - 3 years for any structural controls 	NONE	<ul style="list-style-type: none"> • Cars upon arrival for leaks • Oily equipment 4X/yr for leaks • Storage of fluids (including containers) 4X/yr for leaks • BMPs 4X/yr 	Parameters in monitoring requirements equal to baseline (except baseline requires both grab and composite)

Sector	Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate			
<p>Scrap and Waste Material Processing and Recycling Facilities (Permit conditions broken out between facilities that handle non-liquid recyclable wastes and facilities that handle liquid recyclable wastes)</p>	<p>Scrap and waste material processing and recycling (non-liquid) facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: COD, TKN, nitrate + nitrite as N, aluminum, arsenic, cadmium, copper, iron, lead, PCBs, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.</p>	<p>Scrap and waste material processing and recycling (non-liquid) facilities must collect two grab samples per permit coverage period for the following parameters: Oil and grease, pH, TSS, acute WET, and conduct semi-annual visual examinations of storm water discharges.</p>	<p>NONE</p>	<p>Non-liquid Recyclable Waste Facilities:</p> <ul style="list-style-type: none"> Monthly inspections of facility including pollution control equipment Annual comprehensive site compliance evaluations <p>Liquid Recyclable Wastes:</p> <ul style="list-style-type: none"> Daily site inspections Annual comprehensive site compliance evaluations 	<p>Non-liquid Recyclable Wastes:</p> <p>Monitoring requirements are more stringent than baseline. Facilities will begin monitoring no later than 3 years from date of issuance of permit.</p> <p>Facilities which do not detect acute toxicity in their runoff will not be required to conduct semi-annual WET (Acute) for the remainder of their permit term. If toxicity is detected, permit requires re-evaluation of PPP and implementation of additional controls for facilities that detect toxicity in their runoff.</p> <p>Baseline does not impose monitoring on these types of facilities.</p>
	<p>PPP Requirements (beyond baseline) and Deadlines</p> <ul style="list-style-type: none"> Site map: identify locations of all scrap processing equipment and locations of all significant material storage, e.g., scrap Schedule preventative maintenance of all pollution control equipment Erosion and sediment controls Inbound recyclable materials control program, scrap lead-acid battery program Facilities which detect toxicity in their runoff must implement additional BMPs 				

Sector	Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate			
<p>Power Electric Generating Facilities</p> <p>Landfilling Coal Handling Area</p>	<p>Coal fired and gas/oil fired facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: Aluminum, arsenic, copper, iron, lead, and manganese. These facilities must conduct monthly visual examination of storm water discharges.</p>	<p>Coal fired and coal/oil fired facilities must collect quarterly grab samples for the following parameters: Oil and grease, and pH, and both quarterly grab and composite samples for the following parameters: TSS, nickel, zinc, copper, and conduct a quarterly estimate of storm water flow.</p> <p>Oil fired and oil/gas fired facilities must collect quarterly grab samples for the following parameters: Oil and grease, and pH, and quarterly grab and composite samples for the following parameters: COD, TSS, and conduct a quarterly estimate of storm water flow.</p>	<p>NONE</p>	<p>In addition to or as part of the comprehensive site evaluation, the following areas must be inspected on a monthly basis: coal handling areas, loading/unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.</p>	<p>Regulate discharges from construction of <5 acres.</p> <ul style="list-style-type: none"> Baseline requires oil fired facilities to sample storm water for oil and grease, COD, TSS, pH, and any pollutant limited in an effluent guideline.

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
<p>Motor Freight Transportation Facilities, Passenger Transportation Facilities, Rail Transportation Facilities, and United States Postal Service Transportation Facilities</p>	<p>Motor freight transportation, passenger transportation, rail transportation, and United States Postal Service transportation facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Motor freight transportation, passenger transportation, rail transportation, and United States Postal Service transportation facilities must collect annual grab samples for the following parameters: Oil and grease, TSS, COD, pH, surfactants (MBAs) (cleaning areas only), and must conduct annual flow estimates of storm water discharges. These facilities must conduct quarterly visual examinations of storm water discharges.</p>	<ul style="list-style-type: none"> • Site Map: vehicle and equipment storage areas • Measures and Controls: <ul style="list-style-type: none"> - Vehicle and equipment storage areas—confined to designated area; prevent or minimize contamination. - Fueling area—prevent or minimize contamination - Material Storage - Areas—maintain containers in good condition; prevent or minimize contamination. - Vehicle and equipment cleaning areas—prevent or minimize contamination. - Vehicle and equipment maintenance areas—prevent or minimize contamination - Sanding area—prevent or minimize contamination - Spill Prevention and Response—SPCC plan may be referenced - Employee Training—2/year on specified topics. - Attach copy of washwater NPDES or IU permit application. 	<p>Attain equivalent water quality as oil/water separator</p>	<ul style="list-style-type: none"> • Qualified facility or company personnel shall be identified. 	<p>Miscellaneous</p> <p>Baseline does not impure monitoring on these facilities.</p>

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
<p>Water : Transportation Facilities That Have Vehicle Maintenance Equipment Cleaning Operations, etc.</p>	<p>Water transportation facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: Aluminum, iron, lead, zinc, oil and grease, COD, TSS, and pH. These facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Water transportation facilities must collect annual grab samples for the following parameters: Oil and grease, COD, TSS, pH, aluminum, iron, zinc, acute WET, and estimate flows. In addition, these facilities must collect annual grab samples of their pressure washwater for the following parameters: Oil and grease, COD, TSS, pH, copper, lead, zinc, detergents (MBAs), acute WET, and estimate flows.</p>	<p>Site map: vessel maintenance and repair, pressure washing, painting, sanding, blasting, welding, metal fabrication, liquid storage areas, and material storage area.</p> <ul style="list-style-type: none"> Measures and Controls <ul style="list-style-type: none"> Pressure washing area—collect and contain discharge, remove all visible solids, identify where washwater is released. Blasting and Painting Areas—to MEP, contain activities; prevent or minimize contamination. Material Storage Areas—all materials stored in protected, secured location; prevent or minimize contamination; describe containments or enclosure; Engine Maintenance and Repair Areas—prevent or minimize contamination Material Handling Areas—prevent or minimize Drydock Activities—prevent or minimize General Yard Area—schedule routine yard cleanup 2/yr training on specified topics Post management plans 	<p>Must collect or contain pressure wash water and remove all visible solids from pressure washwater. Must sufficiently contain blasting and painting activities. Must describe containment or enclosure for material storage areas.</p>	<ul style="list-style-type: none"> Monthly in specified areas, including: <ul style="list-style-type: none"> pressure washing area blasting, sanding, and painting areas material storage areas engine maintenance and repair areas material handling areas drydock areas general yard area 	<p>Baseline does not impose monitoring on these types of facilities.</p>

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
Ship and Boat Building or Repairing Yards	<p>Ship and boat building or repairing yard facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: Nitrate + nitrite as N, arsenic, copper, iron, lead, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.</p>	<p>Ship and boat building or repairing yard facilities must collect annual grab samples for the following parameters: Oil and grease, COD, TSS, pH, copper, lead, zinc, acute WET, and any pollutant in an ELG (except passive washwater). These facilities must conduct annual estimates of storm water flows. In addition, these facilities must collect annual grab samples of their pressure washwater for the following parameters: Oil and grease, COD, TSS, pH, copper, lead, zinc, surfactants (MBA's), acute WET, and conduct annual estimates of flow.</p>	<p>Site map: vessel maintenance and repair, pressure washing, painting, sanding, blasting, welding, metal fabrication, liquid storage areas, and material storage areas.</p> <ul style="list-style-type: none"> Measures and Controls <ul style="list-style-type: none"> Pressure washing areas—collect and contain discharge, remove all visible solids, identify where washwater is released. Blasting and Painting Areas—to MEP, contain activities; prevent or minimize contamination. Material Storage Areas—all materials stored in protected, secured location; prevent or minimize contamination; describe containments or enclosure; Engine Maintenance and Repair Areas—prevent or minimize contamination Material Handling Areas—prevent or minimize Drydock Activities—prevent or minimize General Yard Area—schedule routine yard cleanup <p>2/yr training on specified topics</p> <p>Post management plans</p>	<p>Must collect or contain pressure wash water and remove all visible solids from pressure washwater. Must sufficiently contain blasting and painting activities. Must describe containment or enclosure for material storage areas.</p>	<p>Monthly in specified areas</p>	<p>Monitoring specified allows routine external vessel washdown over containment on land where measure are taken to ensure that no detergents or visible solids are discharged.</p> <p>Baseline required annual monitoring for: oil and grease, COD, TSS, pH, any pollutant limited in an effluent guideline to which the facility is subject.</p>

Sector	Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate			
<p>Air transportation facilities using > 100,000 gallons/year of ethylene glycol or > 25 tons/year of urea must collect annual grab samples for the following parameters: Oil and grease, BOD, COD, TKN, pH, and the primary ingredient in the deicing material. These facilities must conduct quarterly visual examinations of storm water discharges.</p> <p>(Dry weather discharges of deicing chemicals are not authorized under this permit)</p>	<p>Air transportation facilities using < 20,000 gallons of glycol and/or < 25 tons of urea must collect annual grab samples for the following parameters: pH, and conduct annual estimates for the following parameters: BOD, COD, and TKN.</p> <p>Air transportation facilities using > 20,000 gallons but < 100,000 gallons of glycol and/or > 25 tons but < 100 tons of urea must collect annual grab samples for the following parameters: BOD, COD, TKN, and pH.</p> <p>Air transportation facilities using > 100,000 gallons of glycol and/or > 25 tons of urea must collect weekly grab samples during the months of December, January, and February for the following parameters: BOD, COD, TKN, and pH.</p>	<p>Site maps must be developed for areas occupied by the tenant(s) of the airport facility.</p> <p>Summary of potential pollutant sources: maintain a record of the types and quantities of deicing chemicals used.</p> <p>Source reduction: evaluate alternative operating procedures which reduce the overall amount of deicing chemicals used and/or lessen the environmental impact of the pollutant source</p> <p>Deadlines:</p> <ul style="list-style-type: none"> 18 months to develop and implement plan 3 years for deicing structural controls 	<p>NONE</p>	<p>In addition to comprehensive site evaluation and standard inspections, 1/week for areas where deicing operations are being conducted.</p>	<p>Baseline requires only those airports with over 50,000 flight operations per year to sample oil and grease, pH, BOD5, COD, TSS, and the primary ingredient used in deicing materials.</p>
<p>Treatment Works</p>	<p>Treatment works facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: Nitrate + nitrite as N, total phosphorus, ammonia, copper, iron, manganese, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.</p>	<p>Treatment works facilities must collect annual grab samples for following parameters: Oil and grease, pH, BOD, and TSS. These facilities must also estimate flow.</p>	<p>Attain water quality of a discharge from oil/water separator</p>	<p>Inspect equipment and industrial areas monthly.</p>	<p>Baseline does not require monitoring.</p>

Sector	Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate			
Food and Kindred Products Facilities	Food and kindred product facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: BOD ₅ , TKN, total phosphorus, ammonia, copper, iron, manganese, and zinc. These facilities must conduct monthly examinations of storm water discharges.	Food and kindred products facilities must collect annual grab samples for the following parameters: BOD ₅ , TSS, oil and grease, TKN, P(T) ^{1,2} , Fecal Coliform ³ , pH, and must conduct quarterly visual examinations of storm water discharges.	NONE	<ul style="list-style-type: none"> • Loading/unloading areas • storage areas • Waste management units • vents and stacks from industrial activities • Spoiled products and broken product container holding areas • Animal holding pens • Staging areas • Air pollution control equipment • Annual inspections <p>All where exposed to storm water exists</p>	<p>Identification of sector and subsector BMPs provided as potential practices to minimize pollutants to storm water</p> <ul style="list-style-type: none"> - Baseline only requires monitoring from animal handling/meat packaging facilities
			<p>PPP Requirements (beyond baseline) and Deadlines</p> <ul style="list-style-type: none"> • Site map to indicate all industrial activities exposed to storm water • Pest control chemical application/storage practices • Annual inspections of potential pollutant source areas • Annual training for employees • Comprehensive site evaluations 1 x YR 		

¹ Applicable to animal handling areas, and production waste management areas at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.

² Applicable to facilities in SIC 204 (grain mills) and other facilities that store, use, or manage chemicals containing phosphorus (including phosphoric acid)

Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
Sector	Proposed			
<p>Textile Mills; Apparel, and Other Fabric Product Manufacturing Facilities</p>	<p>Textile mills, apparel, and other fabric product manufacturing facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Must store all materials in a protected area, away from drains, and clearly labelled. Must describe containment or enclosure of materials stored outdoors. Drum rinse waters must be collected, contained, or treated.</p>	<p>Monthly, include: all containments, storage areas, transfer, and transmission lines; spill prevention; good housekeeping practices; management of process waste products; all structural and nonstructural management practices.</p>	<p>Monitoring data are required to be submitted</p> <p>Baseline does not impose monitoring on these types of facilities.</p>
<p>Wood and Metal Furniture Manufacturing Facilities</p>	<p>Wood and metal furniture and fixture manufacturing facilities must conduct quarterly visual examinations of storm water discharges.</p>	<p>Site map: bulk storage areas</p> <p>Summary of potential pollutant sources: industrial specific significant materials, industrial activities (examples listed).</p> <p>Measures and controls:</p> <ul style="list-style-type: none"> - Material storage area: store materials in a protected area; prevent and minimize contamination; describe containment of enclosure for materials stored outdoors - Material handling are prevent or minimize contamination - Fueling area- prevent or minimize contamination - Above ground storage tank areas- prevent or minimize contaminations - Employee training: semi-annual <p>Discharges from coal and/or wood storage areas must have grab samples taken semi-annually for the following parameters: TSS, and pH. Flows must also be estimated semi-annually.</p> <p>Discharges from petroleum storage and handling areas must have grab samples taken semi-annually for the following parameters: Benzene, oil and grease, and pH. Flows must also be estimated semi-annually.</p>	<p>Visual inspections 4 times per year</p>	<p>Baseline does not require these types of facilities to monitor storm water discharges.</p>

Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
Printing and Publishing Facilities:	Printing and publishing facilities must conduct quarterly visual examinations of storm water discharges.	Printing and publishing facilities must collect annual grab samples for the following parameters: oil and grease, pH, TR zinc, TR copper, and TSS.	<ul style="list-style-type: none"> Good housekeeping; address material handling/storage; Employee training annually on specified topics. 	All materials must be stored in protected area away from drains and labelled.	Annual inspection - all containment and material storage areas, fueling areas, loading and unloading areas, equipment cleaning areas.	These are category xi facilities. <ul style="list-style-type: none"> Baseline does not impose monitoring on these facilities.
Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries:	Rubber, miscellaneous plastic products, and miscellaneous manufacturing facilities must conduct quarterly visual examinations of storm water discharges.	<p>Rubber manufacturing facilities must collect annual grab samples for zinc, any EPCRA Section 313 water priority chemical at the site, and conduct quarterly visual examinations of storm water discharges.</p> <p>Other facilities must collect annual grab samples for the following parameters: Oil and grease, pH, COD, TSS, any EPCRA Section 313 water priority chemical at the site, and conduct quarterly visual examinations of storm water discharges.</p>	<p>Rubber Manufacturers:</p> <ul style="list-style-type: none"> Review the use of zinc and possible means for zinc to enter s.w. discharges. Develop specific BMPs to control zinc. 	NONE	Perform regular inspections as required within the permit.	<p>Exempt from monitoring for a pollutant if in 2 consecutive samples the pollutant is not present in significant levels.</p> <ul style="list-style-type: none"> Baseline only requires monitoring a rubber manufacturer when storm water contacts solid chemical storage areas.

Sector	Monitoring		Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate			
Leather Tanning and Finishing Facilities	Leather tanning and finishing facilities must collect quarterly grab samples during second and fourth years of permit coverage for the following parameters: BOD ₅ , TKN, nitrate + nitrite as N, aluminum, and manganese. These facilities must conduct monthly visual examinations of storm water discharges.	Leather tanning and finishing facilities must collect annual grab samples for the following parameters: COD, TSS, BOD ₅ , chromium, TKN, total phosphorus, oil and grease, pH, and must conduct quarterly visual examinations of storm water discharges.	NONE	Quarterly inspections of leather processing areas, storage areas for chemicals, including but not limited to aboveground tanks, fueling areas, vehicle and equipment maintenance areas, material storage areas, loading and unloading areas, and waste management areas.	Baseline does not impose any monitoring requirements on leather tanning facilities.
Fabricated Metal Products Industry	Fabricated metal products manufacturing facilities must collect quarterly grab samples during the second and fourth years of permit coverage for the following parameters: Nitrate + nitrite as N, aluminum, copper, iron, manganese, and zinc. These facilities must conduct monthly visual examinations of storm water discharges.	Fabricated metal products manufacturing facilities must collect annual grab samples for the following parameters: TSS, cadmium, iron, chromium, zinc, lead, nickel, any pollutant limited in an effluent guideline and conduct quarterly visual examinations of storm water discharges. These facilities must also conduct annual flow estimates of storm water discharges.	NONE	Annual inspections of raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, fueling and maintenance areas, and waste management areas.	Baseline does not impose monitoring on these facilities.

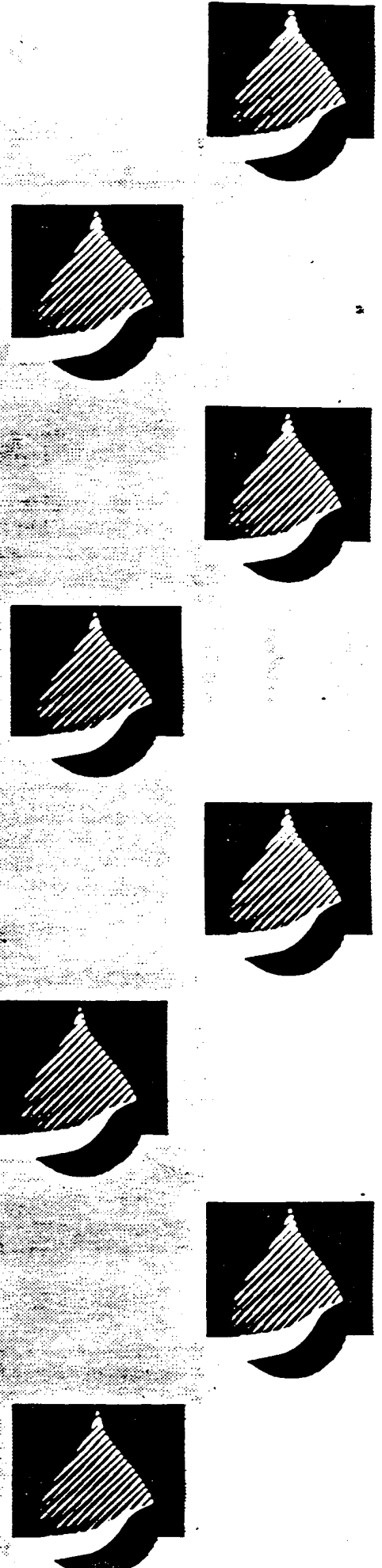
Sector	Monitoring		PPP Requirements (beyond baseline) and Deadlines	Performance Standards/Limits	Inspections	Miscellaneous
	Proposed	Alternate				
Facilities That Manufacture Transportation Equipment, Industrial, or Commercial Machinery Manufacturers	Transportation equipment, industrial, or commercial machinery manufacturing facilities must conduct quarterly visual examinations of storm water discharges.	Transportation equipment, industrial, or commercial machinery manufacturing facilities must conduct quarterly visual examinations of storm water discharges.	<ul style="list-style-type: none"> Annual training on specified topics Annual inspection of areas of potential exposures Good housekeeping for exposed areas Spill prevention and response procedure for exposed areas 	NONE	Annual inspections for loading and unloading areas, storage areas, waste management units, and vents and stacks.	No monitoring requirements. This is consistent with the baseline.
Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods	Electronic and electrical equipment and components, and photographic and optical goods manufacturing facilities must conduct quarterly visual examinations of storm water discharges.	Electronic and electrical equipment and components, and photographic and optical goods manufacturing facilities must collect annual grab samples for the following parameters: Oil and grease, pH, COD, TSS, and any EPCRA Section 313 water priority chemical at the site.	There are no requirements beyond the baseline.	NONE	Perform regular inspections as required within the permit.	Exempt from sampling any pollutant if in 2 consecutive samples pollutant is not present in significant levels <ul style="list-style-type: none"> Baseline does not impose monitoring on these facilities.

Overview of the Storm Water Program

EPA

U.S. Environmental Protection Agency
Office of Wastewater Enforcement and Compliance
Permits Division
401 M Street, SW
Washington, DC 20460

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STORM WATER PROGRAM

BACKGROUND

The 1972 amendments to the Federal Water Pollution Control Act (FWPCA, also referred to as the Clean Water Act or CWA) prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Efforts to improve water quality under the NPDES program traditionally have focused on reducing pollutants in discharges of industrial process wastewater and from municipal sewage treatment plants. Efforts to address storm water discharges under the NPDES program have generally been limited to certain industrial categories with effluent limitations for storm water.

In response to the need for comprehensive NPDES requirements for discharges of storm water, Congress amended the CWA in 1987 to require the Environmental Protection Agency (EPA) to establish phased NPDES requirements for storm water discharges. To implement these requirements, EPA published the initial permit application requirements for certain categories of storm water discharges associated with industrial activity, and discharges from municipal separate storm sewer systems located in municipalities with a population of 100,000 or more on November 16, 1990, (55 FR 47990). Storm water discharge permits will provide a mechanism for monitoring the discharge of pollutants to waters of the United States and for establishing appropriate controls.

ENVIRONMENTAL IMPACTS

Pollutants in storm water discharges from many sources are largely uncontrolled. The "National Water Quality Inventory, 1990 Report to Congress" provides a general assessment of water quality based on biennial reports submitted by the States under Section 305(b) of the Clean Water Act. The Report indicates that roughly 30% of identified cases of water quality impairment are attributable to storm water discharges. The States identified a number of major sources of storm water runoff that cause water quality impacts including separate storm sewers, construction, waste disposal, and resource extraction.

INDUSTRIAL FACILITIES COVERED

EPA has defined the term "storm water discharge associated with industrial activity" in a comprehensive manner to address over 100,000 facilities (see Attachment VII for a complete definition). All storm water discharges associated with industrial activity that discharge through municipal separate storm sewer systems or that discharge directly to waters of the U.S., are required to obtain NPDES permit coverage, including those which discharge through systems located in municipalities with a population of less than 100,000. ~~Discharges of storm water to a sanitary sewer system or to a Publicly Owned Treatment Works (POTW) are excluded.~~ Facilities with storm water discharges associated with industrial activity include: manufacturing facilities; construction operations disturbing 5 or more acres; hazardous waste treatment, storage, or disposal facilities; landfills; certain sewage treatment plants; recycling facilities; powerplants; mining operations; some oil and gas operations; airports; and certain other transportation facilities. Operators of industrial facilities that are Federally, State or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14)(i)-(xi) must also submit applications.

TRANSPORTATION ACT OF 1991

The Transportation Act of 1991 provides an exemption from storm water permitting requirements for certain industrial activities owned or operated by municipalities with a population of less than 100,000. Such municipalities must submit storm water discharge permit applications for only airports, powerplants, and uncontrolled sanitary landfills that they own or operate, unless a permit is otherwise required by the permitting authority. The Transportation Act of 1991 also revises group application deadlines for facilities that are owned or operated by municipalities with a population of less than 250,000. See Attachment II for revised deadlines.



9th CIRCUIT COURT DECISION

The 9th Circuit United States Court of Appeals' opinion in *NRDC v. EPA* (June 4, 1992) and the opinion in *AMC v. EPA* (May 27, 1992), affirmed and upheld the basic structure and direction of the national storm water program. In "*NRDC*", the Court upheld the definition of "municipal separate storm sewer system," the standards for municipal storm water controls, the scope of storm water requirements for oil and gas operations, and EPA's decision not to provide public comment on Part 1 group industrial permit applications. On the question of deadlines, the Court noted that the storm water application deadlines clearly exceeded statutory requirements, but refused to "roll back" the current regulatory deadlines. The Court also emphasized, however, that any further regulatory extension would be illegal. In two other areas the Court invalidated and remanded for further proceedings two regulatory exemptions from the definition of "storm water discharges associated with industrial activity": (1) the exemption for construction sites disturbing less than 5 acres of land (category x), and (2) the exemption of certain "light" manufacturing facilities without exposure of materials and activities to storm water (category xi). In response to these two remands, the Agency intends to conduct further rulemaking proceedings on construction activities under 5 acres and light industry without exposure as ordered by the Court. EPA will not require permit applications for construction sites disturbing less than 5 acres of land and category xi facilities without exposure until this further rulemaking is completed. In "*AMC*," the Court upheld EPA's regulation of storm water discharges from inactive mines.

INDUSTRIAL APPLICATION OPTIONS

The November 16, 1990, storm water regulation presents three permit application options for storm water discharges associated with industrial activity. The first option is to submit an individual application consisting of Forms 1 and 2F. The second option is to participate in a group application. This option, however, is no longer available as the deadlines have passed. The third option is to file a Notice of Intent (NOI) to be covered under a general permit in accordance with the requirements of an issued general permit. The following overview briefly outlines each of these three options and the subsequent attachments provide a more detailed explanation.



Overview of the Storm Water Program

A. INDIVIDUAL APPLICATIONS

Operators of facilities with storm water discharges associated with industrial activity who did not participate in a group application or did not obtain coverage under a general permit, must submit an individual application consisting of Form 1 and Form 2F. The information required in Form 2F includes a site drainage map, a narrative description of the site identifying potential pollutant sources, and quantitative testing data. There are specific requirements for construction activities and oil and gas operations and mining operations. See Attachment I for additional information.

B. GROUP APPLICATIONS

The group application procedure was an option available for facilities that have similar industrial operations, waste streams and other characteristics. Group applications reduced the burden on the regulated community by requiring the submission of quantitative data from only selected members of the group. The group application was submitted in two parts. Part 1 of the application identified all participants, provided facility specific information and proposed a representative sampling subgroup. Part 2 of the application consists of sampling data from each member of the sampling subgroup identified in Part 1 of the application. See Attachment II for additional information.

C. GENERAL PERMIT - NOI REQUIREMENTS

Industrial storm water dischargers that submit an NOI to be covered by the general permit are not required to submit an individual permit application or participate in a group application, provided the discharger is eligible for the permit and an individual permit application is not required by the Director on a case-by-case basis. Submitting an NOI represents a significantly less burden than submitting an individual application or participating in a group application. The NOI requirements for general permits usually address only general information and typically do not require the collection of monitoring data. Submittal of an NOI is only possible where applicable general permits have been issued by the permitting authority. EPA has finalized general permits for construction and industrial activity in the 12 States without NPDES authorization (57 FR 41176, September 9, 1992 and 57 FR 44412, September 25, 1992). As of September 1993, 36 of the 39 authorized NPDES States have general permit authority. See Attachments III, IV and V for additional information.

INDUSTRIAL PERMIT APPLICATION DEADLINES

Type of Application	Deadline	
▲ Individual	October 1, 1992	
▲ Group	Part 1	Part 2
All industrial activities except those owned or operated by a municipality with a population of 100,000 to 250,000.	September 30, 1991	October 1, 1992
Industrial activities owned or operated by a municipality with a population of less than 250,000.	May 18, 1992	May 17, 1993
▲ General Permit NOI	October 1, 1992 (for EPA's general permits)	



MUNICIPAL APPLICATIONS

"Municipal separate storm sewer" is defined as any conveyance or system of conveyances that is owned or operated by a State or local government entity designed for collecting and conveying storm water which is not part of a POTW. The application requirements do not apply to discharges from combined sewers (systems designed as both a sanitary sewer and a storm sewer). Municipal separate storm sewer systems that are addressed by the November 16, 1990, regulations include storm sewer systems located in 173 cities with populations of 100,000 or more; located in 47 counties identified by EPA as having populations over 100,000 in unincorporated, urbanized areas; and systems that are designated by the Director based on consideration of the location of the discharge with respect to waters of the United States, the size of the discharge, the quantity and nature of the pollutants discharged to waters of the United States, the interrelationship to other regulated storm sewer systems, and other factors. The operator of a designated system will be notified by the Director. Under the November 16, 1990, storm water rule, those municipal separate storm sewer systems identified must submit a two-part application. The first part requires information regarding existing programs and the means available to the municipality to control pollutants. In addition, part one requires a field screening analysis of major outfalls to detect illicit connections. Building on this information, the second part requires a limited amount of representative quantitative data and a description of a proposed storm water management plan. See Attachment V for a detailed explanation of the two-part application process.

MUNICIPAL APPLICATIONS DEADLINES

	Part 1	Part 2
Large Municipalities (over 250,000)	November 18, 1991	November 16, 1992
Medium Municipalities (100,000 - 250,000)	May 18, 1992	May 17, 1993



ATTACHMENT I

INDIVIDUAL APPLICATION REQUIREMENTS

These requirements address storm water discharges associated with industrial activity that are not authorized by a general permit and that are not included in a group application.

Application Forms

- ▲ Applicants for discharges composed entirely of storm water must submit **Forms 1 and 2F**
- ▲ Applicants for discharges composed of storm water and process wastewater must submit **Forms 1, 2C, and 2F**
- ▲ Applicants for new sources or new discharges composed of storm water and non-storm water must submit **Forms 1, 2D, and 2F**
- ▲ Applicants for discharges composed of storm water and nonprocess wastewater must submit **Forms 1, 2E, and 2F**
- ▲ Authorized NPDES States may establish their own forms which are at least as stringent as EPA's forms.
- ▲ Forms are available from State permitting authorities for facilities located in NPDES authorized States, or from EPA Regional Offices for facilities located in States without NPDES authorization.

Form 2F Requirements

- ▲ Site map showing topography and/or drainage areas and site characteristics.
- ▲ Estimate of impervious surface area and the total area drained by each outfall.
- ▲ Description of significant materials exposed to storm water, including current materials management practices.
- ▲ Certification that outfalls have been tested or evaluated for the presence of non-storm water discharges that are not covered by a NPDES permit.
- ▲ Information on significant leaks and spills in last 3 years.
- ▲ Quantitative testing data for the following parameters:
 - Any pollutants limited in an effluent guideline to which the facility is subject
 - Any pollutant listed in the facility's NPDES permit for process wastewater
 - Oil and grease, pH, BOD₅, COD, TSS, total phosphorus, nitrate plus nitrite nitrogen, and total Kjeldahl nitrogen
 - Certain pollutants known to be in the discharge
 - Flow measurements or estimates
 - Date and duration of storm event.



Overview of the Storm Water Program

Individual Application Requirements for Construction Activities

- ▲ Provide a narrative description of:
 - Location and nature of construction activity (including a map)
 - Total area of the site and area to be excavated
 - Proposed measures to control pollutants in storm water discharges during and after construction operations
 - Estimate of runoff coefficient and increase in impervious areas after construction
 - Name of receiving water.
- ▲ No quantitative sampling.
- ▲ Application deadline^s
 - 90 days prior to date when construction begins.
- ▲ EPA has not developed a standard form for these discharges at this time (Form 2F is not required).

Application Requirements for Oil & Gas Operations and Mining Operations

- ▲ Operators of oil & gas facilities are not required to submit a permit application unless the facility:
 - Has had a discharge of a reportable quantity for which notice is required under CERCLA or CWA in the past 3 years, or
 - Contributes to a violation of a water quality standard.
- ▲ Operators of active and inactive mining sites are not required to submit permit applications unless the discharge has come into contact with any overburden, raw material, intermediate or finished products, byproducts, or waste products located onsite (inactive coal mining operations released from SMCRA performance bonds and non-coal mining operations released from applicable State or Federal reclamation requirements after December 17, 1990, are not required to submit permit applications).

Available Guidance

Guidance Manual For The Preparation of NPDES Permit Applications for Storm Water Discharges Associated with Industrial Activity (Order #PB92199058), available from NTIS, (703) 487-4650; *NPDES Storm Water Sampling Guidance Document*, available from the Storm Water Hotline, (703) 821-4823.

Deadline

October 1, 1992, or 180 days prior to commencement of a new discharge.



ATTACHMENT II

GROUP APPLICATION REQUIREMENTS

Facilities that discharge storm water associated with industrial activity had until September 30, 1991, to file Part I of the group application in lieu of submitting a complete individual application or an NOI to be covered by a general permit. The Transportation Act of 1991, however, extended the group application deadlines for certain industrial activities owned or operated by a municipality with a population of 100,000 to 250,000. Facilities that are part of the same effluent guideline subcategory or with similar activities and operations were eligible to submit a group application. EPA received 1,243 Part I group applications covering approximately 60,000 facilities.

The group application was submitted in two parts. Part 1 of the application was due by September 30, 1991, and Part 2 of the application was due by October 1, 1992. These deadlines applied to all industrial activities except those owned or operated by a municipality with a population of 100,000 to 250,000. For these facilities, Part 1 of the application was due by May 18, 1992, and Part 2 of the application is due by May 17, 1993. Both parts were submitted directly to U.S. EPA Headquarters, Office of Wastewater Enforcement and Compliance (EN-336), 401 M Street, SW, Washington, DC 20460, regardless of whether or not the included facilities are in a NPDES authorized State. The Transportation Act also addressed municipally owned or operated industrial activities that were denied by EPA from the group application process. Such facilities must submit an individual application or be covered by a general permit within 180 days after the denial was made, or by October 1, 1992, whichever is later.

EPA is currently taking both parts of the application and formulating model permit language. The complete applications and model permit language will then be distributed to every NPDES authorized State or EPA Region (if the State is not NPDES authorized) in which participants are located. The State then reviews the application and model permit language. The State may consider the application and model permit language when issuing permits (either individual or general). The State may ask each or any of the applicants for more information on their facility and/or discharge if the State needs additional information. EPA Regional Offices will follow these same steps for participants located in States without NPDES authorization.

Part 1

- ▲ A list of participants by name, location, and precipitation zone
- ▲ A summary of each participant's industrial activities
- ▲ An explanation of why the participants are sufficiently similar
- ▲ A list of significant materials stored outside by each participant and materials management practices
- ▲ A list of representative dischargers that will submit test data in Part 2.

Part 2

- ▲ Quantitative testing data must be submitted by those facilities identified as "samplers" in Part I of the application.
 - For groups of 4 to 20 members, 50 percent of the facilities must submit data; for groups with 21 to 99, a minimum of 10 dischargers must submit quantitative data; for groups with 100 to 1,000 members, a minimum of 10 percent of the facilities must submit data; for groups with greater than 1,000 members, no more than 100 facilities must submit data; there must be 2 dischargers from each precipitation zone in which 10 or more members of the group are located, or 1 discharger from each precipitation zone in which 9 or fewer members are located. Testing requirements are described under 40 CFR 122.26(c)(1)(i)(E) and 40 CFR 122.21(g)(7).

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Additional Information

A model group application accompanied by detailed information on how to complete both Part 1 and Part 2 group applications is available from the Storm Water Hotline, (703) 821-4823. Technical support with regard to sampling procedures is also available from the hotline (*NPDES Storm Water Sampling Guidance Document*).

Deadlines

- ▲ All Industrial Activities Except Those Owned Or Operated By A Municipality With A Population of 100,000 to 250,000

Part 1 - September 30, 1991
Part 2 - October 1, 1992

- ▲ Industrial Activities Owned or Operated By A Municipality With A Population of 100,000 to 250,000

Part 1 - May 18, 1992
Part 2 - May 17, 1993

Overview of the Storm Water Program



ATTACHMENT III

EPA GENERAL PERMIT REQUIREMENTS (GENERAL INFORMATION)

On September 9 and 25, 1992, EPA issued general permits for construction and industrial activities (57 FR 41176 and 44412) which are intended to initially cover the majority of storm water discharges associated with industrial activity in 12 States and 6 territories without authorized NPDES programs. As of March 1993, 35 of the 39 authorized NPDES States have authority to issue general permits. Facilities in authorized NPDES States should contact their State permitting agencies to determine the status of the general permitting program. The following tables (Attachments III, IV and V) outline conditions in EPA's general permits for industrial activities and construction activities.

Areas of Coverage

- ▲ **Region I**— MA, ME, NH; Indian lands in MA, NH, ME. **Region II**—PR and Indian lands in NY. **Region III**—DC, Federal facilities in DE. **Region IV**— FL; Indian lands in FL, MS, NC. **Region VI**—LA, NM, OK, TX. **Region VII**—SD; Indian lands in CO, MT, ND, SD, UT (except Goshute Reservation and Navajo Reservation lands), WY; Federal facilities in CO; Ute Mountain Reservation in CO, and NM. **Region IX**— American Samoa and Guam; AZ; Territories of Johnston Atoll, and Midway and Wake Island; Indian lands in CA, and NV; Goshute Reservations in UT and NV, Navajo Reservations in UT, NM, and AZ, Duck Valley Reservation in NV and ID. **Region X**—AK, and ID; Indian lands in AK, ID (except Duck Valley Reservation lands), and WA; Federal facilities in WA.

Types of Discharges Covered

- ▲ EPA's general permits cover the majority of storm water discharges associated with industrial activity. Storm water discharges associated with industrial activity that cannot be authorized by EPA's general permits include those:
 - With an existing effluent limitations guideline for storm water
 - That are mixed with non-storm water, unless the non-storm water discharges are in compliance with a different NPDES permit
 - With an existing NPDES individual or general permit for the storm water discharges
 - That are or may reasonably be expected to be contributing to a violation of a water quality standard
 - That are likely to adversely effect a listed or proposed to be listed endangered or threatened species or its critical habitat
 - From inactive mining, or inactive oil and gas operations or inactive landfills occurring on Federal lands where an operator cannot be identified (industrial permit only).

NOI Requirements

- ▲ A facility must submit a Notice of Intent (NOI) to be authorized by the general permit.
- ▲ NOI's do not require the collection of discharge sampling data.
- ▲ Facilities which discharge to a large or medium municipal separate storm sewer system must also submit signed copies of the NOI to the operator of the municipal system.
- ▲ Operators of construction activities must also submit signed copies of the NOI to State or local agencies approving sediment and erosion or storm water management plans under



Overview of the Storm Water Program

which the construction activity is operating.

Deadlines for NOI's

- ▲ On or before October 1, 1992 for existing industrial activities
- ▲ For facilities or construction activities which begin industrial activity after October 1, 1992, an NOI shall be submitted at least 2 days prior to the commencement of the industrial activity.
- ▲ NOI's must be sent to the following address:

Storm Water Notice of Intent
P.O. Box 1215
Newington, VA 22122

Special Conditions

- ▲ Prohibition on most types of non-storm water discharges as a component of discharges authorized by this permit. (These discharges should already have an NPDES permit.) However, EPA's permits authorize certain types of non-storm water discharges.
- ▲ In the event there is a release(s) of a hazardous substance in excess of reportable quantities established under the CWA or CERCLA (see 40 CFR 117.3, 40 CFR 302.4) the discharger must:
 - Notify the National Response Center and the Director, and modify the storm water pollution prevention plan.

Pollution Prevention Plan Requirements

- ▲ Operators of all facilities covered by EPA's general permits must prepare and implement a storm water pollution prevention plan.

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ATTACHMENT IV

EPA INDUSTRIAL GENERAL PERMIT (SPECIFIC REQUIREMENTS)

Contents of NOI for Industrial Activities

- ▲ Street address or latitude/longitude
- ▲ SIC Code or identification of industrial activity
- ▲ Operator's name, address, telephone number, and status as Federal, State, private, public, or other entity
- ▲ Permit number(s) of any existing NPDES permit(s)
- ▲ Name of receiving water(s)
- ▲ Indication of whether the owner or operator has existing quantitative data describing the concentration of pollutants in storm water discharges
- ▲ A certification that a storm water pollution prevention plan has been prepared for the facility (for industrial activities that begin operations after October 1, 1992).

Pollution Prevention Plan Requirements for Industrial Activities

The Pollution Prevention Plan is considered to be the most important requirement of the General Permit. Each industrial facility covered by the general permit must develop a Plan, tailored to the site specific conditions, and designed with the goal to control the amount of pollutants in storm water discharges from the site.

- ▲ **Pollution Prevention Team** - Each facility will select a Pollution Prevention Team from its staff, and the Team will be responsible for developing and implementing the Plan.
- ▲ **Components of the Plan** - The permit requires that the Plan contain a description of potential pollutant sources, and a description of the measures and controls to prevent or minimize pollution of storm water. The description of potential pollutant sources must include:
 - A map of the facility indicating the areas which drain to each storm water discharge point
 - An indication of the industrial activities which occur in each drainage area
 - A prediction of the pollutants which are likely to be present in the storm water
 - A description the likely source of pollutants from the site
 - An inventory of the materials which may be exposed to storm water
 - The history of spills or leaks of toxic or hazardous materials for the past 3 years.

The measures and controls to prevent or minimize pollution of storm water must include:

- Good housekeeping or upkeep of industrial areas exposed to storm water
- Preventive maintenance of storm water controls and other facility equipment
- Spill prevention and response procedures to minimize the potential for and the impact of spills
- Test all outfalls to insure there are no cross connections (only storm water is discharged)

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- Training of employees on pollution prevention measures and controls, and record keeping.

The permit also requires that facilities:

- Identify areas with a high potential for erosion and the stabilization measures or structural controls to be used to limit erosion in these areas
 - Implement traditional storm water management measures (oil/water separators, vegetative swales, detention ponds, etc) where they are appropriate for the site.
- ▲ **Inspection/Site Compliance Evaluation** - Facility personnel must inspect the plant equipment and industrial areas on a regular basis. At least once every year a more thorough site compliance evaluation must be performed by facility personnel
 - Look for evidence of pollutants entering the drainage system
 - Evaluate the performance of pollution prevention measures
 - Identify areas where the Plan should be revised to reduce the discharge of pollutants
 - Document both the routine inspections and the annual site compliance evaluation in a report.
 - ▲ **Consistency** - The Plan can incorporate other plans which a facility may have already prepared for other permits including Spill Prevention Control and Countermeasure (SPCC) Plans, or Best Management Practices (BMP) Programs.
 - ▲ **Deadlines** - The plan must be prepared on or before April 1, 1993, and the facility must be in compliance with the plan on or before October 1, 1993.
 - ▲ **Signature** - The plan must be signed by a responsible corporate official such as the president, vice president or general partner.
 - ▲ **Plan Review** - The plan is to be kept at the permitted facility at all times. The plan should be submitted for review only when requested by EPA.

Semi-Annual Monitoring/Annual Reporting Requirements

- ▲ EPCRA Section 313 facilities
- ▲ Primary metal industries Standard Industrial Classification (SIC) 33
- ▲ Land disposal units/incinerators/BIF's
- ▲ Wood treatment facilities
- ▲ Facilities with coal pile runoff
- ▲ Battery reclaimers

Annual Monitoring/No Reporting Requirements

- ▲ Airports with at least 50,000 flight operations per year
- ▲ Coal-fired steam electric facilities
- ▲ Animal handling/meat packing facilities



▲ Additional facilities, including:

- SIC 30 and 28 with storage piles for solid chemicals used as raw materials that are exposed to precipitation
- Certain automobile junkyards
- Lime manufacturing facilities where storm water comes into contact with lime storage piles
- Oil handling sites at oil fired steam electric power generating facilities
- Cement manufacturing and cement kilns
- Ready-mix concrete facilities
- Shipbuilding and repairing facilities

Additional Monitoring Requirements

- ▲ Testing parameters for facilities are listed in the general permits.
- ▲ At a minimum, all dischargers must conduct an annual site inspection of the facility.

Alternative Certification

- ▲ A discharger is not subject to the monitoring requirements for a given outfall if there is no exposure of industrial areas or activities to storm water within the drainage area of that outfall within a given year.
- ▲ The discharger must certify, on an annual basis, that there is no exposure to storm water, and such certification must be retained in the storm water pollution prevention plan. Facilities subject to semi-annual monitoring requirements must submit this certification to EPA in lieu of monitoring data.

Numeric Effluent Limitations

- ▲ Coal pile runoff: 50 mg/l Total Suspended Solids (TSS) and 6-9 pH

Available Guidance

Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices, available from NTIS (703) 487-4650, order number PB 92-235969; *Summary: Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices* (October 1992), available from the Storm Water Hotline, (703) 821-4823

Overview of the Storm Water Program



ATTACHMENT V

EPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS (SPECIFIC REQUIREMENTS)

Coverage

- ▲ Storm water discharges from construction sites that are authorized by this permit include those that will result in the disturbance of 5 or more acres of land.

Contents of NOI for Construction Activities

- ▲ Street address or latitude/longitude
- ▲ The name, address, telephone number of the operator(s) with day to day operational control and operator status as Federal, State, private, public, or other entity
- ▲ Permit number(s) of any existing NPDES permit(s)
- ▲ Name of receiving water(s)
- ▲ Indication of whether the owner or operator has existing quantitative data describing the concentration of pollutants in storm water discharges
- ▲ An estimate of the project start date and completion dates and estimates of the number of disturbed acres
- ▲ A certification that a storm water pollution prevention plan has been prepared for the facility

Deadlines for Notification

- ▲ An NOI shall be submitted at least 2 days prior to the commencement of construction (commencement of construction is defined as the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities) at any site that will result in the disturbance of 5 or more acres total land area.

Pollution Prevention Plan Requirements for Construction Activities

The Pollution Prevention Plan is considered to be the most important requirement of the General Permit. Each construction activity covered by the general permit must develop a Plan, tailored to the site specific conditions, and designed with the goal to control the amount of pollutants in storm water discharges from the site.

- ▲ **Components of the Plan** - The permit requires that the Plan contain a site description, and a description of the measures and controls to prevent or minimize pollution of storm water. The site description must include:
 - A description of the nature of the construction activity
 - A sequence of major construction activities
 - An estimate of the total area of the site and of the area to be disturbed
 - An estimate of the runoff coefficient of the site after construction is complete
 - Any existing data on the quality of storm water discharge from the site
 - The name of the receiving water
 - Any information on the type of soils at the site; and
 - A site map indicating drainage patterns and slopes after grading activities are complete, areas of soil disturbance, the outline of the area to be disturbed, the location of stabilization measures and controls, and surface waters at the discharge points.

Overview of the Storm Water Program



- ▲ **Measures and Controls** - Measures and controls to prevent or minimize pollution of storm water must include three different types of controls: erosion and sediment controls, storm water management controls and other controls:

- Erosion and Sediment Controls

- **Stabilization (seeding, mulching, etc.)** - Disturbed areas where construction has permanently or temporarily ceased must be stabilized within 14 days of the last disturbance or as soon as practicable in semi-arid and arid areas. (Areas which will be redisturbed within 21 days do not have to be stabilized).
- **Structural Controls** - Sites with common drainage locations that serve 10 or more disturbed acres must install a sediment basin where it is attainable (where a basin is not attainable, sediment traps, silt fence or other equivalent measures must be installed. Sediment basins must provide 3,600 cubic feet of storage per acre drained. Drainage locations which serve less than 10 disturbed acres must install either a sediment basin, sediment trap or silt fence along the down slope and side slope perimeter.
- ▲ Plan shall be completed prior to submittal of an NOI and updated as appropriate.
- ▲ For construction activities that have begun after October 1, 1992, the plan shall provide for compliance with the terms and schedule of the plan beginning with the initiation of construction activities.

Available Guidance

Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, available from NTIS (703) 487-4650, order number PB 92-235951; *Summary: Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices* (October 1992), available from the Storm Water Hotline (703) 821-4823.

Overview of the Storm Water Program



ATTACHMENT VI

MUNICIPAL APPLICATION REQUIREMENTS

The CWA requires that NPDES permits for discharges from municipal separate storm sewer systems include a requirement to effectively prohibit non-storm water discharges into the storm sewers, and controls to reduce the discharge of pollutants to the maximum extent practicable (including management practices, control techniques and system design and engineering methods, and other provisions appropriate for the control of such pollutants). EPA or authorized NPDES States may issue system-wide or jurisdiction-wide permits covering all discharges from a municipal separate storm sewer system. The November 1990 storm water final rule established requirements for a two-part permit application designed to facilitate development of site specific permit conditions. The permit application requirements provide municipal applicants an opportunity to propose appropriate management programs to control pollutants in discharges from their municipal systems. This increases flexibility to develop appropriate permit conditions and ensures input from municipalities in developing appropriate controls.

Part 1

- ▲ General information (name, address, etc.)
- ▲ Existing legal authority and any additional authorities needed
- ▲ Source identification information
- ▲ Discharge characterization including:
 - Monthly mean rain and snow fall estimates
 - Existing quantitative data on volume and quality of storm water discharges
 - A list of receiving water bodies and existing information on the impacts of receiving waters
 - Field screening analysis for illicit connections and illegal dumping.
- ▲ Characterization plan identifying representative outfalls for further sampling in Part 2
- ▲ Description of existing management programs to control pollutants from the municipal separate storm sewer and to identify illicit connections
- ▲ Description of financial budget and resources currently available to complete Part 2.

Part 2

- ▲ Demonstration of adequate legal authority to control discharges, prohibit illicit discharges, require compliance, and carry out inspections, surveillance, and monitoring
- ▲ Source identification indicating the location of any major outfalls and identifying facilities that discharge storm water associated with industrial activity through the municipal separate storm sewer
- ▲ Discharge characterization data including
 - Quantitative data from 5-10 representative locations in approved sampling plans
 - For selected conventional pollutants and heavy metals, estimates of the annual pollutant load and event mean concentration of system discharges

Overview of the Storm Water Program



- Proposed schedule to provide estimates of seasonal pollutant loads and the mean concentration for certain detected constituents in a representative storm event
- Proposed monitoring program for representative data collection.
- ▲ Proposed management program including descriptions of:
 - Structural and source control measures that are to be implemented to reduce pollutants in runoff from commercial and residential areas
 - Program to detect and remove illicit discharges
 - Program to monitor and control pollutants from municipal landfills, hazardous waste treatment, disposal, and recovery facilities; EPCRA Section 313 facilities; and other priority industrial facilities
 - Program to control pollutants in construction site runoff.
- ▲ Estimated reduction in loadings of pollutants as a result of the management program
- ▲ Fiscal analysis of necessary capital and operation and maintenance expenditures.

Available Guidance

Guidance Manual for the Preparation of Part 1 of the NPDES Permit Application for Discharges from Municipal Separate Storm Sewer Systems and NPDES Storm Water Sampling Guidance Document, available from NTIS (703) 487-4650, order number PB 92-114578; Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewers Systems, available from the Storm Water Hotline, (703) 821-4823.

Deadlines

- ▲ Large Municipal Systems With A Population Of 250,000 Or More:

(55 FR 48073, November 16, 1990, Appendices F and H)

Part 1 - November 18, 1991
Part 2 - November 16, 1992

- ▲ Medium Municipal Systems With A Population of 100,000 to 250,000:

(55 FR 48074, November 16, 1990 Appendices G and I)

Part 1 - May 18, 1992
Part 2 - May 17, 1993

Overview of the Storm Water Program



ATTACHMENT VII

STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY

The discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste material, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi) include those facilities designated under the provision of 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are excepted under category (xi) of this paragraph);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 372;
- (iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990 and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining mining claim);
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- (v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

Overview of the Storm Water Program



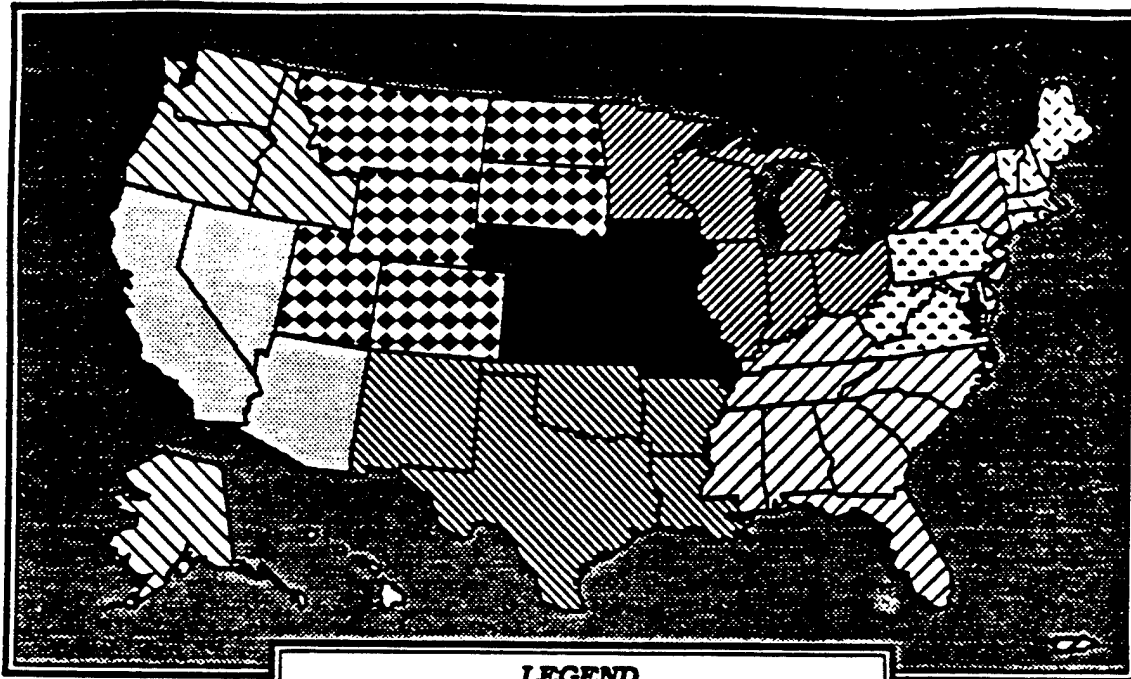
- (vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobiles junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
- (vii) Steam electric power generating facilities, including coal handling sites;
- (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;
- (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the CWA;
- (x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale;
- (xi) Facilities under Standard Industrial Classification 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x))

Note: The Transportation Act of 1991 provides an exemption from storm water permitting requirements for certain facilities owned or operated by municipalities with a population of less than 100,000. Such municipalities must submit storm water discharge permit applications for only airports, power plants, and uncontrolled sanitary landfills that they own or operate, unless a permit is otherwise required by the permitting authority.

**STORM WATER
LIST OF CONTACTS**

1993

REGIONAL OFFICES



LEGEND			
Reg. I		Reg. VI	
Reg. II		Reg. VII	
Reg. III		Reg. VIII	
Reg. IV		Reg. IX	
Reg. V		Reg. X	

Region I

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Region II

New Jersey
New York
Puerto Rico
Virgin Islands

Region III

Delaware
District of Columbia
Maryland
Pennsylvania
Virginia
West Virginia

Region IV

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

Region V

Illinois
Indiana
Michigan
Minnesota
Ohio
Wisconsin

Region VI

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

Region VII

Iowa
Kansas
Missouri
Nebraska

Region VIII

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

Region IX

Arizona
California
Hawaii
Nevada
American Samoa
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APPENDIX H

Active Army and Reserve
Group Participants

Active Army and Reserve Group Participants

Table H-1.
Active Army Group Participant EPA Group 382
(as of March 1994)

Name of installation	State
Fort Greely	Alaska
Fort Richardson	Alaska
Fort Wainwright	Alaska
Fort Chaffee	Arkansas
Fort Huachuca	Arizona
Fitzsimmons Army Medical Center	Colorado
Fort Carson	Colorado
Fort McNair	District of Columbia
Fort Shafter	Hawaii
Helemano Military Reserve	Hawaii
Makua Military Reserve	Hawaii
Schofield Barracks	Hawaii
Wheeler Army Airfield	Hawaii
Fort Sheridan	Illinois
Fort Ben Harrison	Indiana
Fort Leavenworth	Kansas
Fort Riley	Kansas
Fort Campbell	Kentucky
Fort Polk	Louisiana
Fort Devens	Massachusetts
Fort Drum	New York
Fort Hamilton	New York
US Military Academy	New York
Fort Sill	Oklahoma
Fort Buchanan	Puerto Rico
Fort Jackson	South Carolina
Camp Bulliss	Texas
Fort Bliss	Texas
Fort Hood	Texas
Fort Sam Houston	Texas
Fort McCoy	Wisconsin

Table H-2.

*Reserve Army Group Participants EPA Group No. 383
(as of March 1994)*

Name of installation	State
Barnes AMSA 17	Arizona
AMSA 22 Rocky Mountain USARC	Colorado
Cape Henlopen AMSA 84 (G)	Delaware
AMSA 51 (M)	Florida
Clarence Lovejoy AMSA 53	Florida
Col FM Williams AMSA 47	Florida
ECS 50 (G)	Florida
Talmadge Whidden AMSA 52	Florida
Lugenbeel Mall	Idaho
AMSA 45	Illinois
AMSA 46(L)	Illinois
AMSA 35	Indiana
AMSA 36 (L)	Indiana
AMSA 39 (L)	Indiana
AMSA 39 (L)	Kansas
CPL G M Craig AMSA 66 (G)	Massachusetts
ECS/AMSA 65 (G) Storage	Massachusetts
AMSA 40 Sub Shop	Michigan
AMSA 40 (G)	Michigan
AMSA 42	Michigan
AMSA 43 (G)	Michigan
AMSA 43; Sub Shop 1	Michigan
AMSA 149 (G)	Mississippi
Clarksdale USARC	Mississippi
AMSA 122 (G)	North Carolina
AMSA 126 (G)	North Carolina
AMSA 126 (G) Sub Shop	North Carolina
AMSA 128 (M)	North Carolina
Grenier Field AMSA 63 (G)	New Hampshire
Mg. Wm. Stryker USARC/Sub	New Jersey
SFC Nelson V Brittin Sub	New Jersey
Sgt. J. W. Kilmer AMSA 21 (G)	New Jersey
Storck USARC/Sub Shop	New Jersey
Gallagher AMSA 12	New Mexico
Jenkins AFRC (AMSA 34)	New Mexico
AMSA 2	New York
AMSA 8 (G)	New York

Table H-2.*Reserve Army Group Participants EPA Group No. 383
(as of March 1994) (Continued)*

Name of installation	State
AMSA 9 (G)	New York
Bellmore USARC/Sub Shop	New York
Ernie Pyle USARC/AMSA 12	New York
Lockwood USARC	New York
Maj. DW Holleder AMSA 7 (G)	New York
Stewart FLD USARC/AMSA 4	New York
Sub Shop/OMS (Massena)	New York
AMSA 3 (G) (L)	Ohio
AMSA 32 (L)	Ohio
AMSA 56 (G)	Ohio
AMSA 59	Ohio
AMSA 59 Sub Shop 1	Ohio
AMSA 72 (G)	Ohio
Schaffner USARC	Ohio
USARC Bryan, AMSA 72 (G)	Ohio
AMSA 20	Oklahoma
AMSA 104 (G)	Pennsylvania
AMSA 105 (G)	Pennsylvania
AMSA 106 (G)	Pennsylvania
AMSA 110 (G)	Pennsylvania
AMSA 112 (G)	Pennsylvania
AMSA 113 (G)	Pennsylvania
AMSA 29 (G)	Pennsylvania
AMSA 31 (G)	Pennsylvania
AMSA 32 (G)	Pennsylvania
AMSA Sub Shop (M)	Pennsylvania
Butler Sub Shop	Pennsylvania
ECS/AMSA 103 (G)	Pennsylvania
MG J Worts MEM AMSA 23	Pennsylvania
AMSA 68 (G)	Rhode Island
AMSA 121 (G)	South Carolina
Gen. M. Mahon Jr. AMSA 127	South Carolina
AMSA 147 (G)	Tennessee
AMSA 11 (L)	Texas
AMSA 4 (L)/Houston USARC	Texas
AMSA 5	Texas
AMSA 7	Texas

Table H-2.
Reserve Army Group Participants EPA Group No. 383
(as of March 1994) (Continued)

Name of installation	State
AMSA 8	Texas
Corpus Christi USARC	Texas
San Antonio USARC	Texas
AMSA 31 (G)	Utah
ECS 1	Utah
AMSA 89 (G)	Virginia
AMSA 90 (G)	Virginia
2LT R.R. Leisy USARC	Washington
AMSA 9 (G)	Washington
AMSA 49/W OMS and DS — GS	Wisconsin
AMSA 50 (L)	Wisconsin
AMSA 51 (L)	Wisconsin
AMSA 52 Sub Shop	Wisconsin
AMSA 52 (L)	Wisconsin
Onalaska DS Shop	Wisconsin

APPENDIX I

DoD Response to Proposed
Multi-Sector Permit

DoD Response to Proposed Multi-Sector Permit



ACQUISITION AND
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000



17 FEB 1994

Water Docket MC-4101
Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

To Whom It May Concern:


Enclosed please find Department of Defense comments on EPA's draft, NPDES General Permits and Fact Sheets: Storm Water From Industrial Activity, noticed in the Friday, November 19, 1993, Federal Register (Vol. 58, No. 222, p. 61146-61596). One original and two copies of our comments have been provided for your review.

The Department appreciates the efforts EPA has undertaken in this complex issue of storm water permits. Our comments represent a coordinated effort within DoD to consolidate the Military Services' concerns. In general, DoD comments reflect that there are some burdensome requirements placed on the permittee in the areas of monitoring, inspections, record keeping and certification. In addition, there are areas that may need further clarification, such as which industrial sectors would apply to certain DoD facilities. We are anxious to see how this develops.

Thank you for the opportunity to comment on this important issue. If there are any questions concerning our comments, please contact Mr. Edmund Miller at (703) 695-8556.

Sherril W. Goodman
Deputy Under Secretary of Defense
(Environmental Security)

Enclosures

Environmental Security  Defending Our Future

17 February 1994

**Department of Defense (DoD) Comments Regarding
Water Docket MC-4101:
EPA's Proposed Storm Water Multi-Sector Permit
Vol. 58, No. 222 Federal Register, November 19 1993**

II. Types of Discharges Covered

p. 61150 DoD and SIC Codes

1. For the most part, the permit fact sheet still addresses industrial sector coverage on an SIC code basis which can be difficult for DoD facilities to determine applicability. It is obvious to DoD that these sectors are geared towards commercial enterprises, and do not fit well with military installations. Our comments will show the uniqueness of military installations and that some DoD specific needs have been overlooked. The proposed permit addressed the co-location of industrial activities (follow all sectors that apply to the facility), however, EPA has not addressed cases where more than 1 sector affects a particular activity. DoD specific examples include:

a) Army installations conduct recycling operations through the Defense Reutilization Marketing Office (DRMO). Materials found at DRMO yards include furniture to vehicles and scrap metals. Under current definitions, DRMOs may be regulated under Sections VIII.K. hazardous waste treatment, storage or disposal facilities, VIII.M., auto salvage yards and VIII.N., scrap and waste material processing and recycling facilities.

b) Navy installations conduct metal finishing operations at Navy ship yards. Should these installations follow the sectors for ship yards and/or for metal finishing?

c) Military installations conduct several industrial activities inherent to chemical manufacturing (Section VIII.C.), such as hazardous waste treatment, storage, and disposal, and wastewater treatment, which represent permit sectors of their own, that are listed as part of the chemical manufacturing sector.

DoD proposes that in cases where more than one sector affects an activity, the permittee should be given the option of choosing coverage under only one of the sectors - the sector that best addresses a primary function of the facility.

2. DoD strongly requests that EPA consider providing threshold limits (quantity based) for applicability of secondary sectors (activities not considered to be primary functions of the facility). DoD installations can potentially fall under many of these sectors for activities that are extremely small in operation (in terms of quantity and duration). These small secondary activities should be exempt from coverage.

3. Given the time and effort that DoD has placed in collecting sampling data for its groups (Air Force, Navy, Active Army, Army Reserves), we had expected some EPA guidance in regards to sector applicability. More instruction is needed on how to choose the appropriate sector(s).

4. EPA evaluated part II group application data by grouping it into 29 industrial sectors. Judging by the information provided in the fact sheet, there is no indication that data from the DoD groups was used at all in EPA's determination of the "dirty sectors." How was the DoD data used by EPA in determining specific sector monitoring requirements?

II.A. Limitations on Coverage

p. 61151 Fairness and undue burden issues in regards to compliance with the Endangered Species Act (ESA), National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA).

1. DoD applauds EPA's intent on an integrated multi-media compliance approach, but questions the fairness of imposing such conditions only in the multi-sector permit. EPA and state general, as well as individual permits do not include this extra certification as part of the application. EPA should be consistent in its approach and require this certification for all permits, or for none at all.

2. The multi-sector permit requires all applicants to sign a certification statement regarding compliance with the above mentioned Acts. This places an additional burden on limited resources and personnel. In many cases, large DoD installations may have different departments in charge of these different Acts. This requirement would mean that many people must sign off on the certification. For instance, the person in charge of endangered species must evaluate the storm water (SW) discharges, and the pollution prevention plans (SWP3s), to ensure that the discharges and structural best management practice (BMP) implementation (referred to in the SWP3) will not affect endangered species. DoD considers this as an extra undue burden. DoD's opinion is that this is unnecessary.

p. 61151 Clarification of NEPA requirements for storm water discharges subject to new source performance standards.

1. DoD requests clarification on whether EPA intends for SWP3s to specifically address NEPA

requirements. In particular, will facilities be asked to document all reasonable alternatives to proposed structural BMPs, and their environmental consequences? And how often will facilities be asked to re-certify its compliance with NEPA?

2. NEPA requirements apply to operators of facilities with storm water discharges subject to New Source Performance Standards (NSPS) of Section 306 of the Clean Water Act. Out of the 27+ categories of sources listed, only the steam electric generating facilities (40 CFR Part 423) may be somewhat applicable to DoD. However, 40 CFR Part 423.10 specifically states that applicability is to discharges resulting from the operation of a generating unit "by an establishment primarily engaged in the generation of electricity for distribution and sale..." DoD installation steam electric generating plants (SEGP) generate electricity for their own installation use and generally do not distribute or sell the electricity to others, and cannot be compared to a commercial power distributor. DoD's concern is that our SEGPs are not subject to the NSPS in 40 CFR Part 423, and are therefore not subject to NEPA requirements under this category. DoD requests EPA confirmation on this subject.

p. 61152 Clarification and guidance needed in regards to compliance with ESA.

1. The multi-sector permit language should be written to state that it does not relieve the permittee from any obligation to comply with the ESA or substitute for a Federal agency's obligation to consult under Section 7 of the ESA.

2. The EPA will allow coverage under this permit for facilities that either have no effect on listed endangered/threatened species, or those facilities with a Section 10 permit. The size of active Army installations for example, generally range from 10,000 to 100,000 acres, with a few installations almost 1,000,000 acres in size. DoD requests clarification on whether determination of impact to endangered species applies to the entire installation, or only to those areas with storm water discharges associated with regulated industrial activities. If the latter is correct, EPA should specify the range from the storm water discharge (drainage area), including the distance downstream from the outfall(s), that must be evaluated for compliance with ESA/Section 10 permitting.

III. Pollutants in SW Discharges Associated with Industrial Activities in General

The following is information from the National Urban Runoff Program (NURP) executive summary (NTIS P884-185545) which is relevant to discussions in this section of the multi-sector permit. Actual values from this study are provided as Appendix A.

1. Urban storm water runoff flows and concentrations of contaminants are quite variable.

2. Since the distribution of NURP data was adequately represented by a log normal distribution, the log (base e) transforms of all data were used in developing the statistical characteristics. In addition, the event mean concentration (EMC) was used as the primary water quality statistic. EMC is defined as the total constituent mass divided by the total runoff volume. Please confirm that the above procedures should be the same procedures used by EPA to analyze the storm water data submitted as part of the various group permits. Flow-weighted composite storm water data are needed to compare to the NURP data.

3. Heavy metals, especially copper, lead and zinc, were the most prevalent priority pollutants found in urban runoff. Copper, lead and zinc were detected in 91% of the samples. Acid rain may solubilize some heavy metals and increase their concentrations in storm runoff.

4. High nutrient loading (N & P) in urban runoff was not a problem. Mean annual nutrient loads were about an order of magnitude less than those from a POTW.

5. BOD5 and COD concentrations, on an annual load basis, were comparable to those of a POTW with secondary treatment, whereas TSS was an order of magnitude higher in comparison.

6. BMP's of street sweeping, dry basins (water present only during storm event), and grassy swales were found to be ineffective in reducing storm water pollutant loads. Wet basins (permanent ponds) were effective; however, the accumulating sediments in the ponds may be considered a hazardous waste in the future. The mitigating effects of wet lands were found to need further study.

7. The NURP study stated that "a very limited body of data suggests that runoff from industrial sites may have significantly higher contamination levels than runoff from urban land-use sites." Even assuming that they were equivalent, why is EPA using monitoring requirements that are more stringent than any data suggested from the NURP study?

p. 61153 Table 2.

EPA used median NURP values as its bench mark values. If EPA is insistent upon using median values, then this table should list median and not mean values so the reader can make appropriate comparisons.

p. 61154 Credit to group members that submitted completed applications.

EPA requested comments on providing credit to group members.

1. From an equity perspective, some credit must be given to group members that have submitted sampling data. Use the group data in lieu of year 2 monitoring. For those members where all

sampling data is shown to be below current "benchmark" figures, exempt them from year 4 sampling. For those members where some sampling data are above current benchmarks, allow members to conduct sampling for only those parameters in year 4. At a minimum, allow members to include all sampling data in calculations of averages in year 2 sampling.

2. Facilities which participated in a group application, but were not part of the sampling subgroup, may be credited by allowing those facilities extra time for permit compliance. For example, 180 days to submit the NOI and 360 days to comply, instead of 90 days and 270 days, respectively.

IV.B.2. Best Management Practices

p. 61157 Table A

Table A, column 1, row 2 seems to be missing a word/phrase. "Nondestructive..."

VI.B.2. Special Conditions - Release of Reportable Quantities of Hazardous Substances and Oil

p. 61161 Definition of a significant spill

This section references the CWA, which defines an oil sheen as a reportable discharge of oil. This implies that all oil sheens will require a spill report and an update to the SWP3 within 14 days after the incident. An oil sheen can result from the spillage of 2 cups or 2 quarts of oil. For the purposes of this storm water permit, DoD requests that EPA better define what constitutes a significant spill that is considered reportable under this special condition. DoD would also like clarification on the applicability of this section to spills (oil sheens) which originate at non-industrial sites (e.g. privately-owned vehicle parking lot).

VI.C.2. Common Pollution Prevention Plan Requirements - Description of Potential Pollutant Sources

p. 61163 Site map requirement to list all outfall locations, sampling locations, and types of discharges in outfalls.

EPA requested comments on whether the permit should require site maps to list certain kinds of standard information. Due to the magnitude of many DoD installations (some installations have a few hundred outfalls), requirements for this information to be listed on the site map itself would

be too confusing and cluttered. DoD suggests that a supplementary table or narrative form containing this information would be more appropriate and easier to understand. DoD recommends that permittees number all outfalls on the site map, and create a reference table that provides all of the outfall specific information (location, type of industrial activity, potential discharges...). DoD believes that this kind of organization of information (e.g. the numbering and referencing of outfalls) will be a useful tool for the regulators as well as for installation personnel.

p. 61164 Burdensome requirement to prepare an inventory of non-storm water discharge outfalls.

1. EPA requested comments on whether the permit should require facilities to prepare an inventory of outfalls that indicates the types of non-storm water discharges contained in the outfall. DoD requests that EPA clarify its definition of "non-storm water discharge outfalls" to clearly indicate that this applies only to non-storm water outfalls from industrial activities.
2. DoD recommends that this inventory not be required for the first two years of the permit. The reasoning for this is that in the course of preparing the SWP3s, installations are bound to find a few un-permitted discharges. Facilities will need time to investigate the source of these discharges, and seek an NPDES permit.

DoD believes that this requirement would be very helpful to a facility in determining exactly what type of discharge is in a particular outfall. This required information could assist the activity in determining, through the required monitoring, if a new illegal connection has been installed and whether it's in compliance with the discharge limits stipulated in the permit.

VLC.2. Common Pollution Prevention Plan Requirements - Measures and Controls

p. 61165 Minimum employee training frequency of one year recommended.

1. EPA requested comments on whether a minimum training frequency of one per year should be specified for all industrial sectors. A minimum frequency of one year provides consistency across industrial sectors, and is recommended because the term "appropriate interval" is too subjective and will lead to uncertainty and potential inconsistencies between permitting authorities..
2. For those groups, like the Army, Navy, Marine Corps and Air Force, that may be regulated under numerous sectors, an integrated training approach should be taken. However, DoD does object to many of the training requirements listed in the individual sectors (to be discussed later). Storm water training requirements should not be more significant (in terms of required frequency) than its media counterparts.

VI.C.2. Common Pollution Prevention Plan Requirements - Comprehensive Site Compliance Evaluation

p. 61165 Integration of comprehensive site compliance evaluation requirements with other environmental assessments.

1. Several of the industrial sectors call for quarterly comprehensive site compliance inspections. This is unnecessarily frequent for DoD activities because of their current self-assessment programs. For instance, the Navy currently requires its activities to perform annual environmental self-assessments. In addition, there are environmental inspections which occur every two or three years, such as the Environmental Compliance Evaluation (ECE), and the Navy Environmental Inspection Team (NEIT). Federal, state, regional, and local regulators inspect and visit DoD installations regularly. The most reasonable approach for DoD activities would be to combine the comprehensive site compliance inspection with the annual self-assessments.

2. For those sectors that require quarterly comprehensive site compliance inspections, EPA should only require these quarterly inspections for the first year or two, during which time the permittee will be implementing and evaluating the effectiveness of the SWP3. Unless monitoring results indicate that further improvements in the SWP3 are needed, EPA should then allow the facility to switch to an annual comprehensive site inspection cycle.

p. 61165 Burdensome record retention requirements for comprehensive site compliance evaluation reports.

DoD is strongly against the intensive and burdensome record keeping requirements emphasized throughout the permit. Again, referring to the uniqueness of DoD installations in terms of its size and scope, retention of reports for at least 3 years after permit expiration is unreasonable. DoD does not understand the need for such a long retention span in light of the fact that as a result of any inspection, the SWP3 must be revised within 2 weeks. Why is there a need to keep 3 to 8 year old paperwork around if your plan is constantly revised annually? DoD suggests that EPA reduce this burden of records retention to at least 3 years after each inspection, as opposed to 3 years after permit expiration.

p. 61165 SWP3 revision requirements too restrictive.

Requirement to revise SWP3 within 2 weeks after each inspection and implement measures within 12 weeks after each inspection is too restrictive. SWP3 revision should be required within 4 weeks and implementation should be required within 12 weeks for nonstructural control measures. It is not feasible to establish such an implementation time frame for corrective action requiring capital improvements as they depend on obtaining funding. The language should be

modified to allow 12 weeks for identifying the needed capital improvements. Corrective actions requiring expenditure of less than \$300,000 may take up to 6 months to complete; 3 years for projects from \$300,000 to \$1M; and 5 years for projects over \$1M.

VLD.2. Special Requirements - Facilities subject to EPCRA Section 313 Requirements

p. 61165 Appropriateness of special requirements for facilities subject to EPCRA Section 313.

1. DoD questions the appropriateness of these special requirements. The SPCC and RCRA requirements are more than adequate in dealing with Section 313 chemicals. Current pollution prevention measures for Section 313 chemicals are working well, and the EPA should consider eliminating these redundant BMP requirements. Group data submitted to the EPA showed that Section 313 chemical storage areas posed no additional risk to storm water runoff quality.

2. DoD requests language clarification concerning applicability of this section to "facilities over the threshold quantities as specified in 40 CFR 372.25." An installation may have numerous industrial areas, where chemicals manufactured/processed/used in each of these areas do not exceed listed threshold values, but the installation taken as a whole may be over these threshold quantities. EPA should specify that the special requirements for facilities subject to EPCRA Section 313 are only applicable to those industrial areas that are over threshold quantities, as opposed to the whole installation (which can be over 100,000 acres in size).

3. The requirement that Section 313 facilities which have undergone significant modifications must obtain an additional PE certification as soon as practicable, is too vague. A time frame (say 90 days) should be specified.

p. 61166 Appropriateness of extending special requirements to all liquid chemicals stored in above-ground tanks or handle liquid chemicals in areas exposed to precipitation.

1. EPA requested comments on the appropriateness of extending these special requirements to all facilities that store liquid chemicals in above-ground tanks, or handle liquid chemicals in areas exposed to precipitation. This requirement should not be extended to all facilities because response plans are already in place under CWA and RCRA that addresses this issue.

2. The list of water priority chemicals is already comprehensive. It would be too burdensome to extend these special requirements to all liquid chemicals. *All liquid chemicals* is too broad a definition. If certain chemicals are of legitimate concern, then they should be identified specifically. EPA should evaluate risk to human health and the environment when deciding which facilities should take these extra measures and for which chemicals. Requirements should not be broadly extended.

3. If EPA chooses to invoke the Section 313 requirements on all liquid chemical storage facilities, EPA should at least set minimum storage quantities and minimum thresholds for amount of liquid chemicals handled. It may be appropriate to limit these extra requirements to any or all of the following: tanks above a certain size; facilities that handle chemicals at a certain frequency (such as once a week) in areas exposed to precipitation; or facilities that handle certain concentrations, volumes, or quantities of chemicals in areas exposed to precipitation. The tank size, handling frequency, concentration, or volume threshold should be determined based on risk.

p. 61166 Individuals other than Professional Engineers (P.E.'s) to certify SWP3s.

1. EPA requested comments on the appropriateness of allowing individuals other than P.E.'s to certify SWP3s. Being registered does not guarantee any expertise in the required area. More importantly, the requirements may preclude qualified personnel from certifying the plan. DoD believes that other qualified individuals should be allowed to certify pollution prevention plans. Qualified individuals can include individuals with equivalent experience, proper training in pollution prevention, as well as individuals with in-depth knowledge of facility operations and Section 313 water priority chemicals. P.E. certification should only be required when verifying structural designs. P.E. certification is unnecessary and costly.

2. EPA should provide some consistency in who is allowed to certify applications, plans, monitoring reports, etc. ... DoD recommends that the responsible official (or an authorized representative) should certify that the SWP3 has been reviewed by an "competent person" to ensure that it "has been prepared in accordance with good engineering practices." Allow the certifying official to ensure reviewer qualifications.

VI.E.1. Monitoring and Reporting Requirements - Overview

p. 61167 Limited resources vs. the value-added of monitoring requirements.

The resources that will be used for monitoring far outweigh any benefits derived. These resources are best allocated toward the "pollution prevention approach" including source control measures and routine inspections, as outlined in the draft permit. The monitoring provisions currently identified will not meet EPA's goals, which include providing feedback on the effectiveness of the SWP3 and an incentive for implementing pollution prevention measures. The reason is simple: storm water data is highly variable and is not solely dependent upon storm water management practices. This finding is well supported in EPA's own analyses of the NURP and the part II group application data, both which revealed variations in storm water quality. Factors which may impact storm water sample results, and are beyond the control of the discharger include the nature of the precipitation, background groundwater contaminant levels, and the

degree and amount of pervious surface.

p. 61167 Keeping monitoring and reporting requirements to a minimum.

Although the intent of visual inspections, grab samples, and in some cases analytical sampling and reporting, are a method to measure the performance of an SWP3, it does add additional workloads to an understaffed work force as well as a commitment to already constrained funds. Data gathered and reported to regulatory agencies also add additional workloads to understaffed agencies, and the net result is a large amount of reporting and minimal impact on the storm water systems. The EPA should consider keeping such requirements to a minimum.

p. 61167 Sources used to determine bench mark monitoring.

The EPA should reconsider using the sampling data submitted by groups after 1992 in its statistical analysis. This additional information could change what industrial activities would require bench mark monitoring.

p. 61168 Allow alternative pollutant bench mark values.

EPA requested comment on the bench mark levels and the sources used to determine the bench mark values. Certain pollutants (such as pH) naturally occur in excess of the benchmark values. There should be a mechanism to accommodate fundamentally different factors to allow alternative pollutant bench mark values for regionally specific areas and continue coverage under the general permit. Permittees should be allowed to collect background data on total recoverable metals, and receive some kind of credit.

p. 61168 EPA's statistical analysis of group data.

1. Were log normal data used in the EPA statistical analyses to derive mean, median, etc. ... concentrations? The medians in EPA's data sets are always lower than the means. This indicates that the data sets were skewed and not normal bell shaped curves. Certain statistical procedures cannot be used on a skewed distribution. EPA has given no details of the statistical analysis used in the draft permit. A summary of the exact method of statistical analysis used should have been provided in this fact sheet. Results of the EPA statistical analysis of the storm water data needs to be made available to the public so that comparisons with bench mark levels can be made.

2. How does one reliably take a median of three data points? Median values were used because EPA stated that the median is less susceptible to outliers. This statement needs to be adequately referenced! Median values should be randomly distributed about the mean in the NURP study. It is interesting to note that only values less than the mean were selected for inclusion in Table 7.

p. 61168 Table 7 values.

1. Values in this table are unreasonable. All of these pollutant bench mark levels were much lower than the drinking water maximum contaminant levels (MCL). Bench mark levels should be in line with MCLs used for drinking water. A reasonable approach for acceptable limits would be to use a range of values one standard deviation on either side of the mean or median and a single value for the goal to aim for. It looks as if the EPA used the lowest values they could find anywhere for inclusion in this table as so-called bench mark levels. Appendix A (Table 1) shows the comparison between many of the parameters in Table 7 to drinking water regulations.
2. Arsenic, PCB's, copper, silver, and zinc are particularly unreasonable. The comparison shows that drinking water can be legally more contaminated than storm water runoff.
3. How many commercial laboratories in the U.S. can even measure arsenic and PCB's at the levels required? Most local labs can only test reliably and accurately to the parts per billion level (ppb), well above the parts per quadrillion (ppq) levels EPA specified. The only laboratories that have the ability to reach these low levels are large universities and government labs, which have limited capacity and are extremely expensive, costing several thousand dollars per sample.
4. NURP data for the median concentrations of copper, lead and zinc are 4, 5 and 3 times higher than the values listed in Table 7. The NURP study stated that industrial storm water runoff is expected to be more contaminated than urban runoff. All of the available NURP concentrations should be used in Table 7. It appears that EPA selectively chose values to bias the bench mark values on the low side.
5. Values for metals especially need to be reasonable. Several areas of the country have naturally occurring minerals that increase the background concentration of various metals. For example, SW Georgia is high in barium and parts of Nevada are high in arsenic. The EPA draft permit makes no allowances for background concentrations.

The monitoring requirements using the values in Table 7 are excessively burdensome and a cost versus benefit analysis needs to be performed and shown in this permit.

p. 61168 Sources used to determine bench mark levels.

1. The bench mark values are not valid. Site specific characteristics such as background levels, receiving water characteristics, and natural variability make any attempt to establish "national" bench mark values inappropriate. The bench mark values in the draft permit are national averages that should not be used to dictate or measure local watershed NPS control. These values appear to be an attempt to establish a "single-value" criteria similar to those used for point sources, that are not applicable during periods of storm water runoff.

a) Instead of regulating NPS discharges based on numerical standards developed for continuous point sources of pollution, NPS discharge standards should be designed based on water body use and watershed characteristics. Biocriteria should serve as the basis for measuring NPS control success. The standard bench mark approach to point sources are based on the effects of pollutants on a receiving body during periods of low flow. NPS pollution occurs during peak flow periods and results in unique chemical and biological situations. Bench mark standards cannot account for the variability due to manmade versus natural occurrences. As such, facility or regulatory personnel cannot guarantee that unusual storm events will not result in a permit violation or bench mark exceedance.

b) The use of a watershed biocriteria program or a local bench mark program would allow for a much more effective analysis than using generic national standards. Biocriteria will allow discharges to supplement analytical chemical data with other ecological criteria that include biological and habitat considerations. A local bench mark program would account for natural variability.

2. This is not in keeping with Executive Order 12866 of September 30, 1993, which states that "in deciding whether or how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the cost of not regulating." The cost of regulating pollutants to the ppq level for the sake of protecting aquatic life is too costly for the benefits the aquatic life will receive. The premise that no pollutants are acceptable at any level is an unreasonable cost and is not good science. Storm water should be regulated and the public health should be protected, but not to these levels and not at these costs.

3. DoD opposes the bench marks used for trace metals at sites where sampling and analysis are required. These ambient bench marks will be difficult, if not impossible to meet. Either discount the background levels of pollutants from the bench mark values, or set the value to the drinking water MCL or background for that watershed.

p. 61169 EPA use of DoD Part II data in its statistical analyses.

In determining industry-specific monitoring requirements, EPA conducted statistical analyses for all pollutants submitted by facilities within an industrial sector. DoD has a concern that Army, Navy, Marine Corps or Air Force data was not used to a great extent, and request that the industry-specific monitoring requirements be re-evaluated after the inclusion of all DoD group data.

p. 61170 Arbitrary selection of five pollutants greater than bench mark values to determine monitoring requirements.

DoD is concerned that no consideration was given to the type of pollutants to be discharged. Toxics, carcinogens and conventional pollutants were all assigned equal weights in the determination of monitoring criteria. This implies that only the cumulative impact of five pollutants, without consideration of the type of parameter, is worth regulating. The criteria to determine monitoring requirements should contain some provision that considers the relative impact of discharging a toxic compound that is far above bench mark values.

p. 61170 Accounting for weather patterns in various rainfall zones.

In the initial development of the storm water rule, the United States was divided into various rainfall zones. EPA acknowledged the fact that there are different weather patterns occurring throughout the States. Thus, EPA should consider these differing weather patterns in the permit, and include language to accommodate this fact. Rainfall data collected by the NOAA should substantiate the fact that wet weather frequency differs in the east and the west coasts.

Throughout the proposed multi-sector permit, wet weather evaluations are called for in the second (April to June) and third (July to September) quarters of the year. Dry weather evaluations are required in the first (January to April) and fourth (October to December) quarters. This schedule does not correspond to weather patterns on the West Coast, which is most likely to experience wet weather in the fourth and first quarters, and dry weather in the second and third quarters. In some areas of the west, no rain falls in the second and third quarters, but significant rains occur in the fourth and first.

p. 61170 Inclusion of additional industries in the priority list for analytical monitoring requirements.

EPA's point is valid and inclusion of hazardous waste treatment storage and disposal facilities, water transportation facilities, automobile salvage yards, and airports (using more than 100,000 gal/yr of ethylene glycol or 25 tons of urea for deicing) for analytical monitoring requirements seems reasonable.

p. 61171 Table 8.

Note the values listed in Table 8 and compare to those in Table 7. The mean values are always higher than the median values. Median values are almost always zero for any pollutant. Analytically speaking, there is no such thing as zero. The values should have been listed as less than some detection limit. The EPA's own mean values for storm water suggests that the values listed in Table 7 cannot be met.

VI.E.2. Monitoring and Reporting Requirements - Compliance Monitoring

p. 61170 Addition of pH for all sectors where monitoring of a total recoverable metal is required.

DoD agrees with the addition of pH for all sectors where monitoring of a total recoverable metal is required. This is not an expensive burden, and pH data is needed to determine the impact of metal concentrations.

VLE.3. Monitoring and Reporting Requirements - Alternate Certification

p. 61170 Alternative certification provision for facilities with average concentrations above year 2 bench mark values.

If after failing year 2 bench mark values, the facility implements BMPs resulting in no exposure of materials and activities to storm water discharges, then monitoring would not be warranted. These facilities should be allowed to exercise the Alternative Certification provision in year 4 if no materials are exposed to storm water. Instead, facilities should be required to submit documentation describing measures implemented between years 2 and 4 that eliminated the potential for pollutants to contaminate storm water discharges, or show that uncontaminated background levels in the storm water exceed bench mark levels..

VLE.4. Monitoring and Reporting Requirements - Reporting and Retention Requirements

p. 61170 Required rain gauge for all facilities subject to monitoring requirements.

For more accurate estimates of precipitation, EPA may request that facilities subject to monitoring requirements install a rain gauge. What is EPA's justification on the need for daily records of precipitation? Each active Army installation for example, has one rain gauge, but conduct several industrial activities. If a rain gauge is required, will one gauge be sufficient for an entire facility (representative of the site? any location constraints?), or will a rain gauge be required at each regulated industrial activity?

p. 61170 Undue burden of records retention requirements.

This permit requires the retention of all records for at least 1 year after coverage under this permit terminates (6 years total), and a 6 year period from the date of sample collection for monitoring records. Again, due to the size of many DoD installations, the sheer magnitude of the records and the administrative chores involved can be very large. EPA should consider reducing record keeping requirements from 6 years to 3 years. DoD believes that a 3 year retention of records and annual revisions to the SWP3 can satisfy EPA's intent.

VLE.5. Monitoring and Reporting Requirements - Sample Type

p. 61171 Appropriateness of dry and wet weather sampling for situations where sampling of the storm water component of a mixed stream discharge is impractical.

EPA requests comment as to whether dry and wet weather sampling is appropriate where sampling of the storm water component of a mixed stream discharge is impractical. It would seem reasonable that facilities not able to sample pure storm water discharge before it mixes with non-storm water, be required to sample in both dry and wet weather conditions. In this way, one can determine the impact of the storm water runoff as well as the impact of other components of the discharge. This information can aid the facility in developing and implementing pollution prevention measures that addresses each component. EPA would need to clarify which sample must comply with the bench mark values. How will EPA handle situations where dry weather samples exceed storm water bench mark values, and where wet weather samples shows no substantial pollutant increases relative to dry weather samples?

VI.E.6. Monitoring and Reporting Requirements - Representative Discharge

p. 61171 Inappropriateness of EPA requested information to ensure representative discharge.

The requirement that the permittee provide an estimate of the size of the drainage area and estimate of the runoff coefficient of the drainage area for representative discharges should be deleted. DoD understands that providing this information is a means of compliance monitoring by the regulator, however, DoD opposes this requirement based on technical grounds. In most areas, unless you have local precipitation data, runoff coefficients are at best, an estimate. This is even more pertinent to small drainage areas typical of light industrial activities. This information may not insure that the discharges are substantially identical. Regulators should trust permittees to provide good data.

VLE.8. Monitoring and Reporting Requirements - Visual Examination of Storm Water Quality

p. 61171 Inappropriateness of visual examination of storm water quality.

1. Most installations will be required to conduct visual exams (inspection of grab sample for color, odor, clarity, solids, oil sheen, etc. ...) on a monthly or quarterly basis, depending on the applicable industrial sector. Grab samples for the exam shall be collected within the first 30

minutes of when the runoff begins discharging. Sampling shall be carried out by the same individual for the lifetime of the permit to ensure recording consistency. At any military installation, it is unrealistic to expect that the same individual will perform this task over a five year period.

2. DoD strongly disagrees with the usefulness of conducting such an exam. Many DoD installations are large in size (10,000 to 1 million acres) and may have 100 or more regulated (non-representative) storm water outfalls. It is highly impractical to assume that one person can conduct visual sampling from all such outfalls within 30 minutes, or that it will be done by the members of the SWP3 team. Due to the magnitude of many of our installations, this is just not doable.

3. DoD does not see the value added of this unmanageable requirement. The objective of this sampling program is to check the efficiency of current pollution prevention measures like good housekeeping, training and other BMPs in place at the facility. It would be far more effective for DoD installations to conduct visual inspections (site inspection for materials exposed to storm water) rather than visual sampling. Visual examinations are very subjective and an installations investment of resources and time can be better applied elsewhere. This requirement should be eliminated entirely. Instead, EPA may want to consider periodic observations of outfalls during dry weather conditions using a standard EPA checklist.

4. If EPA insists on visual examinations, then DoD recommends that one such examination take place after BMPs are in place, in order to analyze the effectiveness of current pollution prevention practices. EPA should develop a set of criteria on which to evaluate the sample, as these exams are very subjective. EPA should also develop a standardized checklist for facility personnel to use during visual observations sampling. The observations should include a checklist for the presence and characteristics of: floating materials (color, size, foam), suspended materials (color, settling properties), overall color, and odor (solvent, septic, oily)... This would allow for some consistency among the permittees, which should be helpful to regulators when conducting industry comparison analyses, or facility audits. This checklist will also be useful to have for personnel training. EPA should also allow permittees regulated by more than one industrial sector to use some discretion, and stagger their visual examination requirements (e.g. this month conduct exams for a certain number of industrial sectors, and next month conduct exams for the remaining number of industrial discharges).

5. Requirements for frequency of visual exams do not take into account geographic locations/precipitation zone regions. How often can facilities exempt from conducting visual exams due to insufficient rainfall, snow-melt, and/or hazardous conditions?

VI.E.9. Monitoring and Reporting Requirements - SARA Title III, Section 313

p. 61171 Inclusion of monitoring requirements in the baseline general permit (for SARA Title III, Section 313 Facilities) in the multi-sector permit.

EPA requests comment on whether monitoring requirements in the baseline general permit should be included in this permit. As mentioned previously, DoD questions the appropriateness of any special requirements for SARA Title III, Section 313 facilities. TRI facilities are subject to BMPs associated with the CWA, AST's and are more than adequately addressed. As Table 8 indicates, there are no consistent differences in the level of water priority chemicals present in samples from TRI facilities than from non TRI facilities.

VLE.10. Monitoring and Reporting Requirements - Compliance Monitoring

p. 61172 Adequacy of annual monitoring requirements for several types of discharges subject to numeric effluent limitations.

DoD believes annual monitoring requirements to be adequate for evaluating compliance with numeric effluent limitations.

VI. H. Compliance Deadlines

p. 61173 Unrealistic compliance deadlines.

BMP construction requirements must comply with the plan as soon as practicable, but in no case later than 3 years from the effective date of the permit. Three years is not an appropriate time period for the implementation of BMP construction requirements at federal facilities. To receive funding for military construction projects is a 5 year process. This current time-line can default DoD into non-compliance. More time should be allowed.

p. 61173 Requirement for all permittees to submit SWP3 preparation and implementation certification.

This is a self regulating program, and EPA's general permits do not require this. Making this a necessary requirement in the multi-sector permit would introduce an additional burden on the permittees. This certification should not be required because the permit already requires that the plan be prepared and implemented. Failure to prepare and implement the plan is a violation of the permit, whether or not a certification is submitted. Certifications in general should be kept to a minimum.

VII. Cost Estimates for Common Permit Requirements

p. 61173 EPA assumptions for cost estimates are not stated.

1. EPA should state any assumptions made in deriving these estimates. From Army experience, SWP3s have averaged \$60-70K for active army installations, \$15K for Army Reserve installations. From Air Force, Navy and Marine Corps experience, SWP3s have averaged \$50-70K.

2. In reference to earlier comments on page 10, paragraph 3, laboratories with the ability to reach low detection levels (ppq) cost several thousand dollars per sample. This could run a facility with 10 outfalls over \$50K/sampling event, which means a total of \$200K if sampling must be done quarterly. This is in contrast to the \$2.4K - \$4.8K/year monitoring costs listed in EPA Table 10 (Summary of Estimated Additional Cost for Compliance with Storm Water - EPCRA 313 Facilities). If EPA only expects \$3-5K/year of sampling for the average facility, then EPA must be assuming that the analytical cost will be for basic water quality parameters performed at the basic local laboratory, costing \$50-100/sample, and not \$2-3K/sample.

VIII. SPECIAL REQUIREMENTS FOR DISCHARGES ASSOCIATED WITH SPECIFIC INDUSTRIAL ACTIVITIES

The succeeding pages provide a sector by sector analysis of DoD concerns that have not already been addressed. Only those sectors potentially applicable to DoD installations were reviewed:

- C. Chemical and Allied Products Manufacturing Facilities
- D. Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers
- E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
- K. Hazardous Waste Treatment, Storage, or Disposal Facilities
- L. Landfills and Land Application Sites
- M. Automobile Salvage Yards
- N. Scrap and Waste Material Processing and Recycling Facilities

- O. Steam Electric Power Generating Facilities, including Coal Handling Areas
- P. Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and United Postal Service Transportation Facilities.
- Q. Water Transportation Facilities with Vehicle Maintenance Shops/Equipment Cleaning Operations
- R. Ship and Boat Building or Repairing Yards
- S. Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas at Air Transportation Facilities
- T. Treatment Works
- X. Printing and Publishing Facilities
- AA. Fabricated Metal Products Industry

VIII.C. Chemical and Allied Products Manufacturing Facilities

Refer to the general comments.

VIII.D. Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers

p. 61206 Applicability to DoD portable asphalt plants

This section requires an NOI submittal for a portable asphalt plant each time the plant is relocated. DoD portable asphalt plants are small and are used for training purposes. These plants do not produce on a commercial scale. DoD requests that EPA provide guidance on section applicability to DoD installations that have portable asphalt plants used for training purposes only.

p. 61211 Quarterly visual examination

The visual examinations of storm water discharge should not be quarterly. Visual examinations should be conducted at a suitable interval based on the length of time the temporary industrial activity is in use.

p. 61211 Requirement for permittees with facilities that produce asphalt paving or roofing emulsions to monitor storm water discharge at least annually should be revised for activities that are temporary.

A monitoring waiver should apply to some industrial activities due to the temporary nature of the activity. If a full waiver is not possible, then the monitoring interval (other than annual) should be revised based on the length of time the Industrial activity is in use.

p. 61211 DMR reporting waiver.

Due to the temporary nature of the industrial activity, a waiver for submission of a discharge monitoring report (DMR) to EPA should be granted. If sampling is required, then the DMR should be filled out and submitted only if a parameter is violated.

VIII.E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities

p. 61222 Waiver for temporary activities

Due to the temporary nature of the industrial activity such as small temporary cement mixing facility, a sampling/monitoring waiver should apply.

P 61222 DMR reporting waiver.

Due to the temporary nature of the industrial activity, a waiver for submission of a discharge monitoring report (DMR) to EPA should be granted. If sampling is required, then the DMR should be filled out and submitted only if a parameter is violated.

VIII. K. Hazardous Waste Treatment, Storage, or Disposal Facilities

p. 61285 Sector applicability clarification.

1. This section covers storm water discharges from facilities that treat, store, or dispose of hazardous wastes. EPA cited RCRA regulations under 40 CFR Part 264, Subparts I through O and Subpart W. The Army requests clarification on whether Subpart X was intentionally excluded from this section.

2. DoD would like EPA to provide guidance concerning applicability of this section to interim storage sites (temporary hazardous waste storage for less than 90 days) and satellite accumulation areas (limited to 55 gallons). Some DoD installation interim storage sites are not part of any

industrial activity and may be located in a remote area of the base but used for central storage.

p. 61286/8 Table K-1 and K-3 Comments.

1. Table K-1 listed sampling results for only 9 samples. The Army submitted data (Group 382) in this category, please indicate whether this was included in the data analysis for this sector.
2. Monitoring requirements are not justified by the data provided for COD and TKN. The median COD concentration was 41 mg/l while the bench mark cutoff concentration is 65 mg/l, and the median for TKN was 1.3 mg/l while the bench mark is 1.5 mg/l. Both COD and TKN should be dropped from the listed parameters to be monitored. EPA gives no data to support the monitoring requirements established for arsenic, barium, cadmium, cyanide, lead, mercury, selenium and silver. In addition, median total suspended solids levels at 128 mg/l exceeded the bench mark cutoff concentration of 100 mg/l, yet this parameter was not designated for monitoring.
3. Table K-3 lists Cyanide as a pollutant of concern. Please define the form of Cyanide that EPA is referring to.
4. A cut-off concentration of "detection limit" should not be used. A numerical value should be given.
5. Refer back to earlier bench mark comments concerning the low cut-off concentrations.

p. 61289 Proposed alternative monitoring requirements defeats purpose of the group process.

EPA requests comment upon the proposed alternative monitoring requirements. DoD opposes the adoption of this stricter monitoring program. The alternate requirements are basically the same as those requirements found in the baseline general permit for TSDFs, and defeats the whole purpose of submitting group data to determine industry specific pollutants of concern. The adoption of this requirement will result in additional costs to and efforts by the permittees, making the baseline general permit far more attractive.

p. 61290 TSDFs in Region VI.

Region VI does not anticipate allowing coverage for TSDFs under the multi-sector permit for permits issued by EPA Region VI in LA, NM, OK, and TX. DoD would like to know the reason why an EPA Region has decided against allowing such coverage. DoD also requests verification that EPA Region VI will allow coverage of TSDFs in EPA's baseline general permit.

p. 61508 Definition clarification.

DoD recognizes a change in TSDF definition in this permit relative to the original proposed storm water regulations in November 16, 1990 Federal Register (Vol. 55, No. 222, p. 48012). In the November 16, 1990 regulations, p. 48012 col. 1, the definition reads as follows: "hazardous waste treatment, storage, or disposal facilities that are operating under interim status or a permit under subtitle C of RCRA." Under the multi-sector permit, the section applies to storm water discharges associated with industrial activity from "facilities that treat, store, or dispose of hazardous wastes, *including* those that are operating under interim status or a permit under subtitle C of RCRA." DoD requests clarification on EPA intent when using the word "including."

VIII. L. Landfills and Land Application Sites

p. 61294 Addressing landfills closed under an approved plan but not in accordance with 40 CFR 258.60.

1. The draft storm water general permit requires all MSWLF units closed prior to October 1991, but not in accordance with 40 CFR 258.60, to conduct monitoring. Any landfill that has been closed under an approved plan should be exempt from these requirements.

2. DoD has landfills that meet this definition which are currently identified as CERCLA or RFI sites. As these sites have undergone substantial amounts of investigation, there is an inordinate amount of soil and ground water data regarding the types and concentrations of contaminants. The additional monitoring requirements will not benefit the remedial or corrective action process and will only serve to increase investigation/clean up costs. These CERCLA and RFI sites are regulated under CERCLA and RCRA, and do not need to be covered by the storm water permit.

p. 61295 Overburdening inspection requirements.

For operating landfills and land application sites, EPA requires inspections to be conducted at least weekly and within 24 hours of a storm event. DoD believes that weekly inspections are quite sufficient because its landfills/land application sites are already subject to new RCRA requirements. To require an inspection within 24 hours after every storm event is an unnecessary burden which DoD opposes.

DoD would like EPA to address the requirements for NPL sites.

p. 61298 Proposed alternative monitoring requirements defeats purpose of the group process.

EPA requests comment upon the proposed alternative monitoring requirements. Referring to our previous comments, DoD opposes the adoption of all alternative monitoring requirements. The

alternate requirements are basically the same as those requirements found in the baseline general permit, and these defeat the whole purpose of submitting group data to determine industry specific pollutants of concern. The adoption of this requirement will result in additional costs to and efforts by the permittees, making the baseline general permit far more attractive.

VIII. M. Automobile Salvage Yards

p. 61298 Sector applicability to DRMOs.

1. This section applies to facilities engaged in dismantling or wrecking used motor vehicles for parts recycling or resale and for scrap. For instance, the Army does not operate any truly distinct automobile salvage yard such as those found in commercial businesses. As stated in the Army group application 382, Army installations conduct recycling operations through the Defense Reutilization Marketing Office (DRMO). The DRMO is responsible for disposal, marketing, and determining the marketability of all DoD owned materials. Materials found at these facilities range from furniture to vehicles and scrap metal.
2. Under current definitions, DRMOs fall under 3 sectors VIII.K. (TSDFs), VII.M. (Auto salvage yards) and VII.N. (Scrap and waste material processing and recycling facilities). DoD believes these sections are more applicable to true commercial operations than to the DRMO. Many of the requirements contained in these sections are really inappropriate and an overkill for DoD installations, especially considering that recycling, salvaging is not a primary function of an installation. In particular:
 - a) *employee training* (p.61304) - requires annual training in proper handling of oil, used mineral spirits, anti-freeze, and solvents; spill prevention and response; fueling procedures; good housekeeping; and used battery management. Used oil management is already covered under RCRA.
 - b) *reporting* (p.61304) - requires reporting and documentation in the SWP3 of ineffective BMPs, including all incidents of leaking fluids. There can be minor drips and leaks daily, which we believe do not warrant reporting and documentation. DoD standard operating procedure requires all vehicle parts to be drained of all fluids prior to storage and resale. EPA should modify this to require reporting for only substantial leaks.
 - c) *record keeping* (p.61305) - requires maintaining records of drained waste oil, anti-freeze, and gasoline; identification of all transporters (EPA ID), recyclers, and disposal facilities of used waste oil, antifreeze, batteries, scrap and tires; maintain records of waste oil, anti-freeze, batteries, scrap materials and tires sent to recyclers. Again, DoD believes this to be relevant for larger commercial facilities that conduct salvaging as its primary business, but considers this requirement excessive

for DoD installations. We have many small DRMOs, and consider these record keeping requirements to be over burdensome.

3. DoD proposes that EPA introduce a minimum quantity limit for this sector, quite similar to what is in the baseline general permit (monitoring for auto junkyards with over 250 auto/truck bodies, or over 100 units/year dismantled and drainage or storage of auto fluids in areas exposed to storm water).

4. At a minimum, DoD proposes that at installations where vehicles and scrap materials are kept together, only the scrap and recycling sector (VII.N.) should apply since it covers most of the requirements in this section (refer to earlier comments on page 1).

VIII. N. Scrap and Waste Material Processing and Recycling Facilities

p. 61307 Applicability to recycling programs.

1. This section applies to facilities engaged in the processing, reclaiming and wholesale distribution of scrap and waste materials. Does this section apply to recycling programs (e.g. curbside pickups) as well?

2. Refer to comments in Automobile Salvage Yards.

VIII. O. Steam Electric Power Generating Facilities, including Coal Handling Areas

p.61324 Wood-burning power plants excluded from permit

This sector does not address wood-burning power plants although EPA indicates that ash is the most likely potential pollutant from fuel-burning power plants. Wood-burning plants produce very large quantities of ash. Navy installation - NAS Brunswick, ME has a wood-burning plant, though it is not currently being operated on wood. If oil economics or politics make it a desirable option in the future, it could switch back to burning wood.

For storm water purposes, wood-burning steam electric power generating facilities present more of a potential pollution threat than nuclear plants, which are covered by this sector. EPA should consider including wood-burning steam electric power generating facilities in this sector.

p. 61324 Construction activities.

Why has EPA addressed storm water discharges from construction activities which disturb greater

than 5 acres in this section [XI.O.3.a.(3)(1) Construction Activities] of the multi-sector permit?

VIII. P. Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Transportation Facilities, and United Postal Service Transportation Facilities.

p. 61333 Clarification needed of sector coverage.

The facilities covered by this section includes SIC codes 40-44, 5171 or "any other facility with vehicle and equipment maintenance shops or cleaning operations." EPA needs to clarify this all encompassing statement. DoD does not believe that it is EPA's intent in this permit to regulate all gas stations and motor pools with maintenance or cleaning operations, however small. DoD has many reserve centers and requests that EPA consider:

a) limiting the definition of vehicle maintenance operations to motor or transmission overhauls (lubrication and changing oils, and routine maintenance), and

b) establishing a minimum threshold quantity of 7 vehicles per week for sector applicability purposes.

VIII. Q. Water Transportation Facilities with Vehicle Maintenance Shops/Equipment Cleaning Operations

p. 61342 Sector applicability to Navy Activities

Under current definitions, many Navy activities fall under both VIII.Q. vehicle maintenance shops/equipment cleaning operations and VIII.R. ship building and repair. Again, EPA should establish some threshold limits or guidelines for sector applicability.

p. 61346 CWA exempts bilge and ballast water discharges.

Bilge and ballast water discharges are exempt under the Clean Water Act because they are incidental to the operation of a vessel. The requirement to obtain separate NPDES permit coverage for bilge and ballast water discharges should be deleted, or at a minimum, clarified as to the nature and applicability of the NPDES permit (e.g. ships at dry-dock or shore).

p. 61350 Proposed alternative monitoring requirements defeats purpose of the group process.

1. EPA requests comment upon the proposed alternative monitoring requirements. Referring to

our previous comments, DoD opposes the adoption of all alternative monitoring requirements. There is no basis given for requiring acute whole effluent toxicity for all water transportation facilities.

2. The control water for toxicity should be rainwater instead of synthetic dilution water.

VIII.R. Ship and Boat Building or Repairing Yards

p. 61353 Table R-2.

Background levels for lead, iron, and arsenic should be factored into the monitoring concentrations. Refer to earlier comments on bench marks (p. 10).

VIII. S. Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas at Air Transportation Facilities

p. 61361 Discharge of wastewaters to sanitary sewer is unrelated to permitting of storm water discharges.

The requirement to attach a copy of the notification letter (sent to a POTW or an industrial user permit issued under a pretreatment program) to the SWP3 should be deleted. The discharge of wastewaters to the sanitary sewer has no relevance to the permitting of storm water discharges.

p. 61363 Less frequent inspections of areas where deicing operations are conducted are recommended.

1. Inspections of areas where deicing operations are conducted should be required monthly in the winter and quarterly at other times, rather than weekly all year round. There are limited resources available to implement storm water management plans, therefore work efforts should be concentrated on implementing best management plans.

Less frequent inspections would also allow personnel more time for implementing Best management Practices (BMPs) and developing corrective actions, where needed, instead of spending more time looking for failures in implementation. Only a few inspections are needed for feedback on how the system is operating. After each inspection, personnel will need to assess the information gained and find ways to improve the BMPs.

2. With quarterly sampling, one could argue that the effluent quality will remain fairly constant, so long as the activities occurring at deicing operations remain the same. After conducting initial

sampling to reasonably characterize the quality of the effluent, additional monitoring should only be required when best management practices are changed (to see the effects) or when industrial activities differ at the deicing locations.

p. 61365 Estimates for pollutant loadings from deicing operations.

1. This section requires all facilities that conduct aircraft and/or runway deicing/anti-icing operations prepare estimates for annual pollutant loadings resulting from discharges of spent deicing chemicals at the facility (before and after implementation of the facility's SWP3). The purpose is to calculate the net reduction in deicing chemicals loadings to receiving streams. Such estimates must be reviewed and certified by a Registered Professional Engineer.

a) DoD argues that rather than calculating the net reduction in deicing chemicals loadings to receiving streams, permittees should be required to collect a single sample at each outfall during the 4th year of the permit, *after* the BMPs are in place.

b) DoD also opposes the need for P.E. certification. DoD installations have qualified non-P.E. staff that are capable of conducting these simple calculations.

p. 61364/5 More EPA guidance required.

1. Guidance should be given, or a standard methodology developed on how pollutant loadings from discharges of spent deicing chemicals should be calculated. Should all chemicals applied assumed to be discharged?

2. The EPA needs to provide more guidance on sampling during the winter. This section assumes rainfall rather than snowfall. The intent here is to determine if contamination is occurring as a result of de-icing activities by taking samples four times during the de-icing season (for airports that use greater than 100,000 gallons of de-icing fluid). How are we to take a sample of snow melt within the first 30 minutes? How much snow qualifies as 0.1 inches of rainfall? What requirement after a storm event be dealt with in the winter? More guidance is needed in these areas.

p. 61366 Multi-sector permit more reasonable for airport monitoring requirements.

EPA requested comment upon the difference between the monitoring requirements set out for airports in the September 1992 General Permits and the Multi-sector Permits. The multi-sector permit monitoring requirements are more reasonable because they require monitoring of deicing agents only if glycol based or urea agents are used and only if they are used in amounts that exceed threshold levels.

p. 61366 Alternative monitoring requirements.

The Army is against the adoption of the alternative monitoring requirements. Weekly sampling during the months of December through February for facilities using 100,000 gallons or more of glycol based deicing chemicals or 25 tons or more of urea on an average annual basis, is too cold and too burdensome.

VIII. T. Treatment Works

Refer to general comments on the permit.

VIII. X. Printing and Publishing Facilities

Refer to general comments on the permit.

VIII. AA. Fabricated Metal Products Industry

p. 61427 Section applicability to small quantity generators for testing purposes.

This section covers storm water discharges associated with industrial activities from metal fabrication processes and operations. Many DoD facilities produce a small quantity of fabricated metals for testing purposes only. DoD fabricated metal processes may be strictly research and development (R&D) oriented, and are not produced on a commercial scale. DoD requests that EPA exempt these types of activities (R&D), or provide a threshold quantity limit for sector applicability.

p. 61431 EPA requirement for all facilities to provide proof that discharges are not commingled.

1. Due to the concern that many non-storm water discharges may be present at metal fabricators, EPA is requiring that all facilities provide proof that these discharges are not commingled and are appropriately controlled so as to protect all receiving waters. Yet, the special conditions under the permit (XLAA(2)) does not mention the proof mechanism.

2. The requirements to attach permits to the SWP3, such as scrap disposal or recycling, may be difficult if there are no such permits. Permit applications should be allowed as an interim measure.

3. The requirement to attach a copy of the pretreatment notification letter sent to the POTW, to the SWP3, should be deleted. The discharge of wastewaters to the sanitary sewer has no relevance to the permitting of storm water discharges.

ATTACHMENTS

TABLE 1. Comparison of Water Quality Parameters to Monitoring Requirements and Bench Mark Values

APPENDIX J

In-Progress Review (IPR) Minutes



DEPARTMENT OF THE ARMY
U.S. ARMY ENVIRONMENTAL CENTER
ABERDEEN PROVING GROUND, MARYLAND 21010-5401



REPLY TO
ATTENTION OF

4 FEB 1994

SFIM-AEC-ECA (200-1a)

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: The U.S. Army Storm Water Program 16-17 Nov 93, IPR Meeting

1. Reference memorandum, USAEC, SFIM-AEC-ECA, 27 Oct 93, SAB.
2. Enclosed are minutes pertaining to the U.S. Army Storm Water Program IPR meeting, held on 16-17 Nov 93. Request that you thoroughly review this package as it consists of pertinent information on the progress of the U.S. Army Storm Water Pollution Prevention Plans and information on recent regulatory developments.
3. Request that the enclosed be widely disseminated within your Command.
4. Questions or comments on this issue should be directed to Mr. Paul Josephson, at DSN 584-1217 or (410) 671-1217.

FOR THE COMMANDER:

Encl


DAVID C. GUZEWLICH
Chief

Environmental Compliance Division

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Meeting

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MEMORANDUM FOR RECORD

SUBJECT: Minutes for the Army Storm Water In-Progress Review (IPR) Meeting

1. An IPR meeting was held on 16 and 17 Nov 93 at the Omni Inner Harbor Hotel in Baltimore, MD to review the Army's progress to date in obtaining storm water discharge permits and to discuss lessons learned in developing installation pollution prevention plans. Also, a representative from the Environmental Protection Agency (EPA) provided an overview of the draft multi-sector permit, published in the 19 Nov 93 Federal Register. An agenda and list of attendees is provided as enclosure 1.
2. Mr. David Guzewich, Chief, Environmental Compliance Branch, U.S. Army Environmental Center began the meeting with an introduction to the Army's storm water program. His presentation was followed by a presentation by Mr. Paul Josephson, storm water project officer for the Environmental Compliance Branch. Mr. Josephson discussed the Army storm water program goals which are: obtain a permit, comply with permit (SWPPPs, identify BMPs (Best Management Practices), sampling program), and track and comply with storm water regulations. The current Army compliance status and the SWPPP contracting mechanism through USACE was then reviewed.
3. Mr. Steven Hearne, Office of the Director, Environmental Programs (ODEP) presented the draft Army Strategic Action Plan (ASAP) for storm water. Mr. Hearne encouraged attendees to provide comments on the ASAP by the end of the month. Mr. Hearne plans to brief General Brown on the ASAP in December. Mr. Hearne responded to the audiences request to explain how the budget numbers in the ASAP had been calculated. Concerns were raised because budget forecasts did not account for operations and maintenance of structural storm water best management practices (BMPs), or upcoming future storm water regulations.
4. Mr. Fred Quinones, Storm Water project chief for the U.S. Geological Survey (USGS), outlined the USGS' observations and contributions to the Army storm water regulation compliance program during 1993. The USGS has observed that determining the water quality of storm water runoff is an expensive and frustrating process. Storm water runoff sampling and analysis for Active Army Installations seeking individual permits costs can range from \$200,000 to \$400,000. Personnel costs can be high, as sampling personnel spend much of their time waiting for a storm to occur. USGS has estimated a 33% success rate of chasing storms. The USGS has contributed to a significant amount of the Army's storm water regulation compliance work. Their contribution has been, and will continue to be, significant.

a. Completed storm water permit applications at 15 Reserve and 3 Active Army (TRADOC) installations.

b. Finalized the model Storm Water Pollution Prevention Plan (SWPPP).

c. Trained army storm water coordinators to implement storm water regulation compliance programs at their facilities.

d. Completed SWPPPs for Army facilities in the states of New Jersey, New York, Massachusetts, Rhode Island, Delaware, New Hampshire, Kansas, and Arizona.

e. Drafted the Forces Command (FORSCOM) fiscal year 1994 storm water regulation compliance plan.

f. Developed proposals for pilot studies of the impact of Army activities on storm water runoff pollutant levels. He also discussed status of SWPPPs at a few installations.

5. Mr. Daniel Prine, of the U.S. Army Corps of Engineers (USACE) Mobile District briefed on the status of the U.S. Army SWPPP contract. Mr. Prine is the project manager for this contract. 6 SWPPPs are due 27 Sept 93, all others are due 16 Jan 94. 6 MACOMs participated in the Corps contract. Average cost data is as follows:

<u>Avg SWPPP cost/installation</u>	<u>MACOM</u>	<u># installations</u>
\$61,482	FORSCOM	17
\$45,175	TRADOC	18
\$13,327	USARC	109
\$47,222	AMC	1 (Monmouth)
\$32,165	HSC	2
\$41,734	USMA	1

Total	\$3.5 Million	(148 plans)

Mr. Prine also presented slides and discussed funding obligations and costs by MACOM, as well as budget per USACE district. His duties will soon be assumed by Mr. Charles Smith of the Mobile District.

6. Ms. Carmelita White, U.S. Environmental Protection Agency HQ (USEPA) began her presentation with a brief overview of the group process. Originally 1250 industries submitted group applications, this number was then reduced to 750 (representing 44,000 different facilities). EPA has permitting authority in 12 states. This permit will originally be used by the 12 non-NPDES states. The other states will take a look at EPA's multi-sector permit. Only 13 NPDES states so far have stated that they won't do much with the permit. EPA will publish the proposed multi-sector permit 19 Nov 93. There will be a 90 day comment period.

a. The multi-sector permit is 800 page permit, and the fact sheet 900 pages. The permit breaks down into sectors (or chapters), grouped according to 2 digit SIC codes. Originally, 33 sectors were identified (1 sector addressed all DOD installations). Now there are only 29 sectors (DOD is no longer its own sector).

There may be more than 1 condition/sector for your installation to abide by, depending on the activities that occur at your site. Section 1 is general guidance. Expect to see some differences between this permit and EPA's general permit in monitoring requirements and SARA Title III. The permit will not allow discharge of combined storm water and process wastewater, or dry weather discharges. This permit also ties in other environmental programs. A facility must address Fish & wildlife issues, Historic Preservation Act and NEPA before they can be issued a permit.

b. Any facility that fits a sector criteria and eligibility requirements can use the multi-sector permit, even if they did not participate in a group application. The permit is very explicit about what activities are covered. Facilities seeking coverage under the multi-sector permit must submit a Notice of Intent. The need to submit a notice of intent arises from the legal requirement that multi-sector permit applicants sign a statement swearing that they have read and understand all permit conditions.

c. This permit requires storm water runoff sampling and analysis for facilities in seventeen of the twenty-nine industrial sectors. The analysis results must meet the benchmark values set forth in this permit in order for the facilities storm water runoff pollution control measures to be considered adequate. These benchmarks resulted from the USEPA's analysis of the group permit applicant sampling data. Each facility that falls into one of the seventeen industrial sectors who must monitor their storm water runoff must collect and analyze quarterly grab samples of this runoff during the second year of the permit. (The multi-sector permit will be valid for five years.) Facilities whose storm water runoff contains levels of pollutants that exceed the bench marks set forth in the multi-sector permit must improve their best management practices and resample during the fourth year of the permit. If the pollutant levels in the facilities' storm water runoff samples fall below all benchmark levels, than the facility need not sample again until the second year of it's next permit. Facilities falling into the other 12 sectors are not required to do chemical monitoring, but must conduct visual monitoring on a monthly basis. Monitoring results must be submitted to an EPA led state.

d. According to Ms. White, 90 day hazardous waste storage areas will not require monitoring.

e. Airport monitoring is now based on quantity usage of chemicals (rather than on number of flights).

f. Deadlines. From the final storm water permit issuance date, Army facilities have:

1. 90 days to transfer into the multi-sector permit from the General permit.
2. 90 days to submit an NOI
3. 270 days, following submission of the NOI to develop and implement the SWPPP

g. EPA response to comments on this draft multi-sector permit should take at least three to four months and probably longer.

h. Army facilities can switch from the group to a general baseline, but on the condition that the day they apply for the general permit, their SWPPP must be ready.

i. Future Regulations: Phase II will affect municipalities. EPA's report to Congress concerning Phase II, identifies some unpermitted activities specific to DOD (commercial activities, ammunitions testing, storage, warehouses...). EPA is looking into whether municipalities should have a storm water management program for the entire installation. Ms. White recommended that the Army be pro-active and look at everything on the installation (not only the industrial activities), including commercial and residential aspects. States may designate an installation under 402(p) of the CWA. Construction sites should be included in overall storm water management plan to control storm water runoff. (the 5 acres ruling has still not been resolved).

j. EPA Storm Water Hotline: (703) 821-4823

7. Representatives from each of the MACOMs provided the attendees with an update on their installation's status.

a. Mr. Ron Nichols - FORSCOM

Mr. Nichols handed out and discussed his FORSCOM management plan for FY94. Application types: 14 Group/9 General/4 Individual. 19 out of 25 storm water coordinators completed training. SWPPPs are being prepared as follows: 17 by USACE, 8 by USGS and 2 by the installations.

b. Ms. Debra Potter - Training and Doctrine Command (TRADOC)

All TRADOC installations are preparing SWPPPs. 16 under USACE contract, 1 individual (Fort Rucker). 11 out of 17 storm water coordinators completed training. Application types: 7 Group/7 NOIs/3 Individual. TRADOC has a \$1.8Million dollar program.

c. Ms. Debra Richert - Army Reserve Command (ARCOM)

ARCOM is doing its own funding for its storm water program. Application types: 101 Group/3 Group & Gen/34 NOIs/3 Group & Individuals/2 Individuals (Alabama). Reserve tenants must be included in the host MACOMs SWPPP. 107 SWPPPs were prepared under ACE contract, 36 under USGS contract. Ms. Richert would like to develop and implement standardized best management practices for reserve installations. Universal Systems Incorporated will be preparing video training programs for operations personnel. The goal is to have these exportable training video's done by April 94.

d. LTC Tom Allen - Army Materiel Command (AMC)

The AMC conducts all the manufacturing for the Army. Each AMC facility has unique factors affecting its storm water discharge, so they could not participate in the group permit application process. There are a total of 64 AMC installations.

1. All regulated AMC facilities have applied for permits
 - 50 permits required
 - 27 permits received
 - 1 facility covered by Navy application
 - 1 facility covered by Air Force application
 - 21 yet to be received
2. All AMC facilities are obtaining SWPPPs
 - 30 SWPPPs completed
 - 18 in progress
3. AMC storm water budget:

FY93 Requirements	\$3.19M	FY94 Requirements	\$2.41M
Obligated	770K	Obligated	0
Budgeted	2.32M	Budgeted	2.03M

e. CPT Greg Castello - National Guard Bureau

50 States have approved or pending permits. 4 States (Alabama, Colorado, Kansas, Oregon) do not require a permit. National Guard issues: SIC's, numerous sites across state, washracks. The Governor owns the National Guard troops and supports most of the sites.

f. Mr. George Takamiya - United States Army Pacific

USAPAC has 3 regulated installations. These installations are located in the states of Alaska and Hawaii. All of them are participating in the group application. The Alaska SWPPPs are being developed by Alaska Corps District, while those in Hawaii are being developed under the Pacific Corps District.

g. Mr. Rudy Verzuh - United States Military Academy.

The Military Academy has two regulated installations; West Point and Stewart Army Subpost (Reserve).

8. Ms. Wendy Mervine, Army Environmental Hygiene Agency (AEHA) discussed AEHA's interpretation of which Army motor pools are regulated under storm water. AEHA's position is that only those motor pools involved with transportation on an installation, are covered. Only a few Army motor pools meet this definition. Ms. Mervine presented AEHA's point of view as follows.

a. Currently the Army is treating all of it's motor pools at Active Army facilities as regulated under storm water.

b. AEHA feels that the regulations require the Army to treat motor pools as regulated only when those motor pools present actual threats to storm water quality (include all tactical vehicle maintenance shops, but not all motor pools). (i.e, conduct some sort of risk analysis).

Include

Post taxi
Troop buses
Transportation Companies
Motor pools that create
storm water runoff pollution

Don't include

Engineering Companies
Medical
Armored
GSA motor pools
Light division
Heavy division
Communications vehicles
DEH vehicles
TAC shops
ECS (reserves)

9. Bobby Shelton, USACE Fort Worth, discussed Corps policy of obtaining storm water construction permits for new construction projects.

a. Inspections take place once per week.

b. Both Corps and construction operators need to apply for the permit, 48 hours before dirt is moved.

c. Corps has generic boilerplate from which it writes it's SWPPPs.

10. Fred Quinones, USGS discussed sampling requirements in each state (see enclosure).

Day 2: 17 Nov 93

11. Fred Quinones, USGS, discussed overall training program objectives: overview of the storm water regulations, and other regulations that interact with storm water; pollution prevention; source contact; train USACE contractors.

12. Brad White, from the Miamisburg, Ohio office of Environmental Science & Engineering, Inc. (ES&E), was hired through a Buffalo Corps of Engineers contract to conduct storm water training for installation personnel, USACE personnel and USACE contractors. To date, training attendees consisted of: 84 percent Army, 2 percent Navy; 3 percent Air Force, 11 percent USACE contractors. Training presenters/participants included ES&E, USGS, the Logistics Management Institute, the Construction Engineering Research Laboratory, Ohio Department of Natural Resources/Pollution Engineering, USAEC, USEPA/California Storm Water Task Force, and personnel from Forts Riley, Carson, Belvoir and McClellan. Training lasted three days: Regulatory issues were covered on Day 1, BMP discussions and field trip on Day 2, and compliance issues on Day 3.

13. Paul Somerville of Universal Systems Inc. (USI), has been contracted to conduct training for Reserve installation personnel via an exportable training package. Mr. Somerville also discussed Huntsville training needs analysis, SAT-systems approach to training, and COESAT-Corps of engineers systems approach to training. Analysis-Design-Development-Implement-Evaluate. Army training is divided into 20 program areas. 16 are completed, the 4 remaining are: asbestos, hazardous materials, radon, and environmental R & D. Training needs analysis for the Air Force combines Environmental occupational health & safety in their training.

USI will develop the Army Reserve Command exportable training package. They plan to distribute these training videos to the ARCOMs by 1 April 94. The modules (videos & handouts) will address four areas: regulatory overview, BMPs, aviation support facility issues and environmental compliance assessment systems (ECAS). It will be directed towards the shop supervisor (GS-8) who will implement the SWPPP. Basic training approach is the exportable training support package (TSP) which will include several modules, tailored to the audience.

14. The Major Army Command representatives listed some of the storm water related issues for which the USAEC must provide guidance. These issues include BMPs for the various Army activities, definitions of regulated activities, and additional storm water program implementation support. Issues listed were the following.

- a. training (USAEC is developing pollution prevention training)
- b. superfund sites

- c. racks locating discharges from wash racks/solids from wash racks
- d. airfield maintenance & operations
- e. oil & water separators
- f. old chemical complexes
- g. contaminated soils exposed to rain
- h. OB/OD sites
- i. residues of explosives & chemicals
- k. runoff from parking lots
- l. landfills
- m. point discharges from spills
- n. hazardous waste storage areas (satellite sites)
- o. DRMO operations
- p. impact/training ranges
- q. AST's & SWMU's
- r. flooding of industrial areas
- s. conflicting guidance on regulations
- t. staffing and funding
- u. command support

15. Mr. Quinones discussed the lessons learned from developing the USGS model SWPPP. This plan was developed while working on Fort Rucker's storm water program.

- a. USGS should have done more preliminary work
- b. Should have provided easy to use templates for A/E firms
- c. The Army needs to standardize electronic packages, many facilities lacked the software required for USGS' electronic version of their model SWPPP.
- d. The USGS has addressed transportation & vehicle maintenance activities in their model plan. If the Army changes its policy, then the templates will need to be modified.

16. Wendy Mervine, AEHA, had these observations based on her review of SWPPPs:

- a. SWPPP teams, description of potential pollution sources and site maps were generally good.
- b. Three year historical data missing from the inventory of exposed materials.
- c. Spills and leaks description was fair. The SWPPPs did not indicate if the spills have been mitigated.
- d. Sometimes available storm water runoff sampling data was missing. Two sites with that AEHA knows to have data indicated that no data existed. There was no discussion of relative risk/potential to contaminate storm water runoff.

e. Deficiencies in BMP descriptions

1. major problem areas for all the SWPPPs reviewed
2. no implementation dates for BMPs
3. little or no discussion of existing BMPs
4. BMPs are listed as suggested rather than required
5. most BMPs are general, not specific, simply a re-iteration of the permit rule

f. Deficiencies in sediment and erosion control sections

1. plans did not identify specific erosion control mechanisms.
2. the checklists for the comprehensive site evaluations were non-existent/inadequate
3. Non-storm water discharge certifications were not signed or identified. Non-storm water discharges must be permitted or eliminated

g. AEHA feels that two SWPPP issues must be addressed.

1. interpretation of regulated motor pools
2. identifying advanced BMPs and time deadlines in SWPPPs

17. Daniel Prine, USACE, identified the following as concerns of the USACE personnel charged with preparing SWPPPs.

- a. Locating installation information
- b. Closing installations (BRAC)
- c. ARCOMS unaware of which facilities have applied for permits.

18. A discussion then ensued about who is responsible for group applicants. It seems that most group participants believe that the USAEC will obtain their permit for them without any effort on their part. When group members are contacted by the state regulators instructing their installation to switch their application from the group application to the state general permit, installations automatically assume that they need not concern themselves with it because USAEC will apply for this new permit for them. This is a false assumption. By the end of FY94, all storm water compliance responsibilities will be passed down to the installations. Paul Josephson will send guidance letter to installations stating that installations should actively participate in permitting issues. It was also recommended that USAEC distribute a "historical fact sheet" of what has been done to date.

19. Bob Baxter, Logistics Management Institute (LMI), started his presentation with a discussion of unique conditions in the New Jersey General permit. New Jersey General has no sampling requirements, but facilities must eliminate storm water contact with all source materials. For example, Scrap yards - only a clean scrap yard can be covered under New Jersey general (no exposure to paints, oil and grease, or other significant materials) because it falls into the non-contaminated contact category.

a. Mr. Baxter then discussed Minnesota specific requirements: A permit is needed if there is storm water contact with industrial activities and if you have a discharge to waters of the state. Minnesota does not currently require Reserve facilities to obtain storm water permits.

b. Mr. Baxter then discussed lessons learned from his review of SWPPPs

1. establish & maintain liaison with regulatory agency.
2. develop clear comprehension of components of regulated discharge. Is a plan even needed? There may be a regulated activity, but there may be no discharges to waterbody of the state (e.g., AMSA 24 has discharge to a drainage ditch which then eventually empties into a water body 2 miles away).
3. incorporate existing SOPs, documents, plans into the SWPPP (can inc. by reference): SPCC, ISCP; site assessment; training records; hazardous materials inventory; permits.
4. tracking of hazardous materials is not well documented.
5. utilize USGS maps, identify topographic features.
6. create diverse pollution prevention team (PPT): civilian & military troop personnel; co-located reserve units; delegate responsibility.
7. conduct site inspection at appropriate times (troops in training is not a good time. See installation at time when its full of activities).
8. SWPPP components needs to be site specific (general generic statements is not good enough).
9. discuss the details of training. Mention who, what and when.
10. comprehension of SWPPP elements: summary of pollutant sources; know difference between baseline BMPs and advanced BMPs.
11. review preliminary plans with installation personnel.

c. Mr. Baxter has identified 600+ reserve activities that may be required to obtain a storm water permit, but have yet to apply. The Army will not be sure of which reserves will be required to apply for permits until Mr. Baxter completes his investigation of the requirements of all state storm water regulations.

20. At this time, Mr. Josephson conducted an open forum for storm water concerns. The group voiced their concerns on tenant facilities, relative storm water pollution potential of Army activities, and the need to clarify which Army activities are regulated.

a. Co-location issues: Reserves and National Guard Facilities as tenants. Army installations must include them in their SWPPP. The host installation commander is responsible for the environmental compliance of all tenant activities. Notices of

APPENDIX K

Bibliography: Internal Army
Memoranda and Storm Water
Guidance Manuals

Bibliography: Internal Army Memorandums and Storm Water Guidance Manuals

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APPENDIX L

Bibliography: External Storm
Water Guidance Manuals

Bibliography: External Storm Water Guidance Manuals

ENVIRONMENTAL PROTECTION AGENCY¹

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Guidance Manual for the Preparation of NPDES Permit Applications for Storm Water Discharges Associated With Industrial Activity, EPA 505-8-91-002, April 1991.

NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001, July 1992.

Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, September 1992.

Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

Users Guide for Investigations of Inappropriate Pollutant Entries into Storm Drainage Systems, EPA 600-R-92-238, January 1993.

OTHER

NPDES/Storm Water Management Guide, U.S. Postal Service, HBK-AS-554, May 1992.

Storm Water Permit Manual Vol. 1, 2. Thompson Publishing Group. © 1991, 1992. 1725 K Street, N.W., Suite 200, Washington DC, 20006, 1-800-879-3169.

VDOT Manual of Practice For Planning Storm Water Management, Shaw L. Yu and Robert J. Kaighn, Jr., VTRC 92-R13, March 1992.

¹ Also refer to pages L-5 and L-6 (from the 10 November 1993 EPA Multi-Sector General Permit Press Package).

REGULATIONS

40 CFR (Code of Federal Regulations) Parts 122 - 124.

Federal Water Pollution Control Act (FWPCA) (As Amended by the Clean Water Act of 1977) - Section 402(p).

Final NPDES General Permits for Storm Water Discharges From Construction Sites; Permit Language, Federal Register Vol. 57, No. 175, 41209, 9 September 1992.

Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity; Permit Language, Federal Register Vol. 57, No. 175, 41297, 9 September 1992.

Final NPDES General Permits for Storm Water Discharges From Construction Sites; Notice, Federal Register Vol. 57, No. 187, 44412, 25 September 1992.

Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity; Notice, Federal Register Vol. 57, No. 187, 44438, 25 September 1992.

Final Rule, 55 Federal Register 47990, 16 November 1990.

Proposed Multi-Sector Permit – NPDES General Permits and Fact Sheets: Storm Water from Industrial Activity; Federal Register Vol. 58, No. 222, 61146 – 61596, 19 November 1993.

Water Quality Act of 1987 - (Amends Section 402(p) of the FWPCA).

EPA TECHNICAL GUIDANCE FOR STORM WATER DISCHARGERS

Available from the Storm Water Hotline (703) 821-4823 and the Office of Water Resource Center (202) 260-7786
(unless indicated otherwise)

GUIDANCE

Storm Water Discharges Associated with Industrial Activity

- Guidance Manual for the Preparation of NPDES Permit Applications for Storm Water Discharges Associated with Industrial Activity (EPA-505/8-91-002, April 1991).
— Available from NTIS at 703/487-4650; Order number PB 92-199058 for \$35.
- Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (EPA-832-R-92-006, September 1992).
— Available from NTIS at 703/487-4650; Order number PB 92-235969. Also available through the Education Resource Information Center/Clearinghouse at 614/292-6717; Order number 477N for \$26.75).
- Summary of Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (October 1992).
- Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices (EPA-832-R-92-005, September 1992).
— Available from NTIS at 703/487-4650; Order number PB 92-235951 for \$35. Also available through the Education Resource Information Center/Clearinghouse at 614/292-6717; Order number 482N for \$22.50.
- Summary of Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices (October 1992).

Storm Water Discharges from Municipal Separate Storm Sewer Systems

- Guidance Manual for the Preparation of Part 1 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Water Systems (EPA-505/8-91-003A, April 1991) Available from NTIS at 703/487-4650; Order No. PB 92-114578 for \$35)
- Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems - Final (December 4, 1992)

General

- Investigation of Inappropriate Pollutant Entries Into Storm Damage Systems: A User's Guide (EPA/600/12-92/238, January 1993).
— Available from the Center for Environmental Research Information at 513/569-7562.
- Manual of Practice Identification of Illicit Connections - Draft (EPA, September 1990)
- NPDES Storm Water Sampling Guidance Document (EPA 833-B-92-001, July 1992)
- Sediment and Erosion Control: An Inventory of Current Practices - Draft (EPA, OWEC, April 20, 1990)

PROGRAM SUMMARIES

- Overview of the Storm Water Program (October 1993)
- Question and Answer Document, Volumes 1 and 2 (March 1992 and September 1993)
- Raindrop Report (October 1993)

OTHER RESOURCES

- Environmental Impacts of Stormwater Discharges: A National Profile (EPA 841-R-92-001, June 1992)
- List of EPCRA (SARA Title III) Section 313 Water Priority Chemicals
- List of Reportable Quantities for Hazardous Substances Under CERCLA
- List of State and EPA Regional Storm Water Contacts (April 1993)
- Urban Runoff Management Information/Education Products Catalog (Version 1)

Source: EPA Storm Water Multi-Sector General Permit Press Package, 10 November 1993.

October 1993

EPA TECHNICAL GUIDANCE FOR STORM WATER DISCHARGERS

Available from the Storm Water Hotline (703) 821-4823 and the Office of Water Resource Center (202) 260-7786
(unless indicated otherwise)

OTHER RESOURCES (Contd.)

- Ninth Circuit United States Court of Appeals Opinion Regarding AMC v. EPA (May 27, 1992), and NRDC v. EPA (June 4, 1992)
 - Ninth Circuit Storm Water Decision Fact Sheet (September 3, 1992)
- Phase II Deadline Extension Fact Sheet (December 3, 1992)
- State NPDES Program Status (August 1993)
- State Storm Water General Permits Status (September 1993)
- Typical Values of Annual Storm Events Statistics for Rain Zones of the United States ("Urban Targeting and BMP Selection," EPA Region V, November 1990)
- When It Rains, It Drains: What Everyone Should Know About Storm Water (EPA 832-F-93-002, August 1993)

REGULATIONS/NOTICES

- November 16, 1990 Federal Register (55 FR 47990) - National Pollutant Discharge Elimination System (NPDES) Permit Application Requirements for Storm Water Discharges - Final Rule
 - Summary of November 16, 1990 Storm Water Application Rule
- March 21, 1991 Federal Register (56 FR 12098) - Application Deadline for Group Applications - Final Rule; Application Deadline for Individual Applications - Proposed Rule
- August 16, 1991 Federal Register (56 FR 40948) - NPDES General Permits and Reporting Requirements for Storm Water Discharges Associated with Industrial Activity - Proposed Rule
 - Summary of August 16, 1991 Storm Water Implementation Rule
 - August 16, 1991 Storm Water Implementation Rule Package Fact Sheet
- November 5, 1991 Federal Register (56 FR 50548) - Application Deadlines; Final Rule and Proposed Rule
- April 2, 1992 Federal Register (57 FR 11394) - Application Deadlines, General Permit Requirements and Reporting Requirements, Final Rule
 - April 2, 1992 Storm Water Program Rule Fact Sheet
- September 9, 1992 Federal Register (57 FR 41176) - Final NPDES General Permits for Storm Water Discharges from Construction Sites; Notice
- September 9, 1992 Federal Register (57 FR 41236) - Final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity; Notice
- September 9, 1992 Federal Register (57 FR 41344) - National Pollutant Discharge Elimination System, Request for Comment on Alternative Approaches for Phase II Storm Water Program; Proposed Rule
- September 25, 1992 Federal Register (57 FR 41236) - Final NPDES General Permits for Storm Water Discharges from Construction Sites; Notice
- September 25, 1992 Federal Register (57 FR 44438) - Final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity; Notice
- December 18, 1992, Federal Register (57 FR 60444) - Permit Issuance and Permit Compliance Deadlines for Phase I Dischargers; Final Rule
- April 14, 1993, Federal Register (58 FR 19427) - NPDES General Permit for Storm Water Discharges Associated with Industrial Activity Located in the Commonwealth of Puerto Rico - Notice

FORTHCOMING

- Handbook of Urban Runoff Pollution Prevention Control Planning (EPA-625-R-93-004, December 1993)
- Guidance Manual for Implementing Storm Water Management Programs (publication information not yet available)

Source: EPA Storm Water Multi-Sector General Permit Press Package, 10 November 1993.

October 1993

APPENDIX M

Signatory Requirements – Sample
Delegation Letter

Signatory Requirements – Sample Delegation Letter

Director
Water Management Division
Regulatory Authority
Any town, USA 00000

Date

Dear Sir/Madam:

I am the Commanding Officer with responsibility for overall operations at Fort X. Under the provisions of 40 CFR 122.22 & 123.25 [or state equivalent], I hereby delegate authority to persons in the following named positions as my duly authorized representative. (*Select from the following list, or modify, as appropriate.*)

1. Director, Engineering and Housing, or Public Works Department and
2. Chief, Environmental Division, DEH

They will act on my behalf on matters concerning the NPDES storm water program.

Sincerely,

Commander
Fort X

cc:

APPENDIX N

Executive Order 12856: Federal
Compliance with Right-to-Know
Laws and Pollution Prevention
Requirements

Executive Order On Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements

Planning requirements

- **Require each Federal agency to develop a written pollution prevention strategy for the entire agency considering the pollution prevention hierarchy.**
- **Poll prevention policy statement must designate principal responsibilities for development, implementation, and evaluation of the strategy.**
- **Designate an individual responsible for coordinating agency pollution prevention efforts.**
- **Commit Federal agencies to source reduction as primary method of environmental protection and compliance.**
- **Written agency plan 12 months from signing.**
- **Require each Federal agency to provide EPA a preliminary list of facilities that potentially meet the reporting requirements under the threshold provisions of EPRCA, PPA and the Executive Order.**
- **Written list by December 31, 1993.**



Executive Order On Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements

TRI Reduction Goals

- Each Federal agency to establish voluntary goals to reduce total releases and off-site transfers of TRI toxic chemicals by 50 percent by 1999.
 - Written plan by December 1995.
- Each Federal agency may choose to expand their toxic chemical reduction goals to achieve a 50 percent reduction for all toxic pollutants by 1999.
 - Written plan by December 1995.
 - TRI chemicals form the core of toxic pollutants.
 - Agencies define toxic pollutant category in initial strategy.
- Goal is agency-wide, not necessarily applicable to each facility.
- Require each facility to identify its own reduction goals and prepare written plan outlining how it will contribute to agency-wide 50 percent target.
- Baseline for measuring reductions will be either 1993 or 1994, depending on when federal agency first began TRI reporting. Baseline includes sum of releases and transfers from agency facilities reporting under TRI.



~~Executive Order On Federal Compliance With Right To Know Laws and Pollution Prevention Requirements~~

Acquisition and Procurement of Goods and Services Goals

- **Require all Federal agencies to develop a plan and goals for eliminating or reducing the unnecessary acquisition of products containing extremely hazardous substances or toxic chemicals.**
- **Require each Federal agency to voluntarily develop a plan and goals for reducing its own manufacturing, processing, and use of products containing extremely hazardous substances or toxic chemicals.**
- **Require all Federal agency to revise their specifications and standards and identify opportunities to eliminate or reduce acquisition and procurement of extremely hazardous substances or toxic chemicals.**



~~Executive Order On Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements~~

EPCRA Requirements

- All Federal facilities meeting EPCRA definition of "facility" and exceeding thresholds for manufacture, use or processing of toxic chemicals must report under Section 313 of EPCRA, as amended by the PPA. Reporting applies even if facilities do not fall within SIC codes 20-39.
- TRI Report for all releases, transfers, and wastes of toxic chemicals.
- Not applicable to Federal agency facilities outside the customs territory of the United States.
- TRI requirements take effect no later than January 1, 1994 (Reports due July 1995).
- All Federal facilities also subject to other EPCRA requirements (e. g., Emergency Planning and Response Provisions Sections 302 through 312).
- Submit Emergency Planning Notification to Local Emergency Planning Committee (LEPC) under Section 302 of EPCRA. -- 7 months from signing.
- Submit information for the preparation of Comprehensive Emergency Response Plans under Section 303 of EPCRA. -- 12 months from signing.



~~Executive Order On Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements~~

EPCRA Requirements (Continued)

- **Submit an Emergency and Hazardous Chemical Inventory Form under Section 312 of EPCRA. -- by December 1994.**
- **Submit Emergency Notification of Releases of an Extremely Hazardous Substance under Section 304 of EPCRA. -- by January 1994.**
- **The Executive Order does not apply to GOCO's not within SIC codes 20-39, as these are not currently covered by TRI and Executive Order cannot create new legal obligations for private parties, although the overall agency reports shall take into account such activities. Future contract revisions will require GOCO's to provide their agencies with the information necessary for TRI reporting.**



~~Executive Order On Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements~~

Implementation

- **Agency heads responsible for identifying all facilities (GOCO and GOGO) subject to TRI reporting requirements, and to report such information to EPA. -- Preliminary list by December 31, 1993.**
- **Each Federal agency must prepare yearly progress reports on compliance.**
- **Federal agencies also made responsible for monitoring their own compliance with the Executive Order.**
- **EPA permitted to conduct inspections and monitor agency compliance with the Executive Order.**
- **EPA to prepare annual report to President regarding compliance with TRI.**
- **Facilities may claim national security exemption from Executive Order compliance in accordance with EPRCA Section 120j.**
- **Executive Order identified as high priority for funding.**
 - **A-11**
 - **OMB A-106 (Federal Agency Pollution Prevention and Abatement Planning Process)**
 - **Apply life-cycle analysis and total cost accounting**



~~Executive Order On Federal Compliance With Right To Know Laws and Pollution Prevention Requirements~~

Implementation (Continued)

- **Inter-agency Task Force will be established to coordinate implementation of Executive Order.**
- **Composed of Federal agency heads.**
- **Establish the "Federal Government Environmental Challenge Program" to recognize outstanding agency and employee environmental management performance.**

Public Access

- **Public access afforded to all strategies, plans, and reports prepared in compliance with the Executive Order by both individual Federal agencies and EPA.**



Presidential Documents

Title 3—

The President

Executive Order 12856 of August 3, 1993

Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements

WHEREAS, the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001-11050) (EPCRA) established programs to provide the public with important information on the hazardous and toxic chemicals in their communities, and established emergency planning and notification requirements to protect the public in the event of a release of extremely hazardous substances;

WHEREAS, the Federal Government should be a good neighbor to local communities by becoming a leader in providing information to the public concerning toxic and hazardous chemicals and extremely hazardous substances at Federal facilities, and in planning for and preventing harm to the public through the planned or unplanned releases of chemicals;

WHEREAS, the Pollution Prevention Act of 1990 (42 U.S.C. 13101-13109) (PPA) established that it is the national policy of the United States that, whenever feasible, pollution should be prevented or reduced at the source; that pollution that cannot be prevented should be recycled in an environmentally safe manner; that pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and that disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner;

WHEREAS, the PPA required the Administrator of the Environmental Protection Agency (EPA) to promote source reduction practices in other agencies;

WHEREAS, the Federal Government should become a leader in the field of pollution prevention through the management of its facilities, its acquisition practices, and in supporting the development of innovative pollution prevention programs and technologies;

WHEREAS, the environmental, energy, and economic benefits of energy and water use reductions are very significant; the scope of innovative pollution prevention programs must be broad to adequately address the highest-risk environmental problems and to take full advantage of technological opportunities in sectors other than industrial manufacturing; the Energy Policy Act of 1992 (Public Law 102-486 of October 24, 1992) requires the Secretary of Energy to work with other Federal agencies to significantly reduce the use of energy and reduce the related environmental impacts by promoting use of energy efficiency and renewable energy technologies; and

WHEREAS, as the largest single consumer in the Nation, the Federal Government has the opportunity to realize significant economic as well as environmental benefits of pollution prevention;

AND IN ORDER TO:

Ensure that all Federal agencies conduct their facility management and acquisition activities so that, to the maximum extent practicable, the quantity of toxic chemicals entering any wastestream, including any releases to the environment, is reduced as expeditiously as possible through source reduction; that waste that is generated is recycled to the maximum extent practicable; and that any wastes remaining are stored, treated or disposed of in a manner protective of public health and the environment;

Require Federal agencies to report in a public manner toxic chemicals entering any wastestream from their facilities, including any releases to the environment, and to improve local emergency planning, response, and accident notification; and

Help encourage markets for clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals through revisions to specifications and standards, the acquisition and procurement process, and the testing of innovative pollution prevention technologies at Federal facilities or in acquisitions;

NOW THEREFORE, by the authority vested in me as President by the Constitution and the laws of the United States of America, including the EPCRA, the PPA, and section 301 of title 5, United States Code, it is hereby ordered as follows:

Section 1. Applicability.

1-101. As delineated below, the head of each Federal agency is responsible for ensuring that all necessary actions are taken for the prevention of pollution with respect to that agency's activities and facilities, and for ensuring that agency's compliance with pollution prevention and emergency planning and community right-to-know provisions established pursuant to all implementing regulations issued pursuant to EPCRA and PPA.

1-102. Except as otherwise noted, this order is applicable to all Federal agencies that either own or operate a "facility" as that term is defined in section 329(4) of EPCRA, if such facility meets the threshold requirements set forth in EPCRA for compliance as modified by section 3-304(b) of this order ("covered facilities"). Except as provided in section 1-103 and section 1-104 below, each Federal agency must apply all of the provisions of this order to each of its covered facilities, including those facilities which are subject, independent of this order, to the provisions of EPCRA and PPA (e.g., certain Government-owned/contractor-operated facilities (GOCO's), for chemicals meeting EPCRA thresholds). This order does not apply to Federal agency facilities outside the customs territory of the United States, such as United States diplomatic and consular missions abroad.

1-103. Nothing in this order alters the obligations which GOCO's and Government corporation facilities have under EPCRA and PPA independent of this order or subjects such facilities to EPCRA or PPA if they are otherwise excluded. However, consistent with section 1-104 below, each Federal agency shall include the releases and transfers from all such facilities when meeting all of the Federal agency's responsibilities under this order.

1-104. To facilitate compliance with this order, each Federal agency shall provide, in all future contracts between the agency and its relevant contractors, for the contractor to supply to the Federal agency all information the Federal agency deems necessary for it to comply with this order. In addition, to the extent that compliance with this order is made more difficult due to lack of information from existing contractors, Federal agencies shall take practical steps to obtain the information needed to comply with this order from such contractors.

Sec. 2-2. Definitions.

2-201. All definitions found in EPCRA and PPA and implementing regulations are incorporated in this order by reference, with the following exception: for the purposes of this order, the term "person", as defined in section 329(7) of EPCRA, also includes Federal agencies.

2-202. *Federal agency* means an Executive agency, as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense.

2-203. *Pollution Prevention* means "source reduction," as defined in the PPA, and other practices that reduce or eliminate the creation of pollutants through: (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation.

2-204. *GOCO* means a Government-owned/contractor-operated facility which is owned by the Federal Government but all or portions of which are operated by private contractors.

2-205. *Administrator* means the Administrator of the EPA.

2-206. *Toxic Chemical* means a substance on the list described in section 313(c) of EPCRA.

2-207. *Toxic Pollutants*. For the purposes of section 3-302(a) of this order, the term "toxic pollutants" shall include, but is not necessarily limited to, those chemicals at a Federal facility subject to the provisions of section 313 of EPCRA as of December 1, 1993. Federal agencies also may choose to include releases and transfers of other chemicals, such as "extremely hazardous chemicals" as defined in section 329(3) of EPCRA, hazardous wastes as defined under the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901-6986) (RCRA), or hazardous air pollutants under the Clean Air Act Amendments (42 U.S.C. 7403-7626); however, for the purposes of establishing the agency's baseline under 3-302(c), such "other chemicals" are in addition to (not instead of) the section 313 chemicals. The term "toxic pollutants" does not include hazardous waste subject to remedial action generated prior to the date of this order.

Sec. 3-3. Implementation.

3-301. *Federal Agency Strategy*. Within 12 months of the date of this order, the head of each Federal agency must develop a written pollution prevention strategy to achieve the requirements specified in sections 3-302 through 3-305 of this order for that agency. A copy thereof shall be provided to the Administrator. Federal agencies are encouraged to involve the public in developing the required strategies under this order and in monitoring their subsequent progress in meeting the requirements of this order. The strategy shall include, but shall not be limited to, the following elements:

(a) A pollution prevention policy statement, developed by each Federal agency, designating principal responsibilities for development, implementation, and evaluation of the strategy. The statement shall reflect the Federal agency's commitment to incorporate pollution prevention through source reduction in facility management and acquisition, and it shall identify an individual responsible for coordinating the Federal agency's efforts in this area.

(b) A commitment to utilize pollution prevention through source reduction, where practicable, as the primary means of achieving and maintaining compliance with all applicable Federal, State, and local environmental requirements.

3-302. *Toxic Chemical Reduction Goals*. (a) The head of each Federal agency subject to this order shall ensure that the agency develops voluntary goals to reduce the agency's total releases of toxic chemicals to the environment and off-site transfers of such toxic chemicals for treatment and disposal from facilities covered by this order by 50 percent by December 31, 1999. To the maximum extent practicable, such reductions shall be achieved by implementation of source reduction practices.

(b) The baseline for measuring reductions for purposes of achieving the 50 percent reduction goal for each Federal agency shall be the first year in which releases of toxic chemicals to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic chemicals reported in the baseline year for all of that Federal agency's facilities meeting the threshold applicability requirements set forth in section 1-102 of this order. In no event shall the baseline be later than the 1994 reporting year.

(c) Alternatively, a Federal agency may choose to achieve a 50 percent reduction goal for toxic pollutants. In such event, the Federal agency shall delineate the scope of its reduction program in the written pollution prevention strategy that is required by section 3-301 of this order. The baseline

for measuring reductions for purposes of achieving the 50 percent reduction requirement for each Federal agency shall be the first year in which releases of toxic pollutants to the environment and off-site transfers of such chemicals for treatment and disposal are publicly reported for each of that Federal agency's facilities encompassed by section 3-301. In no event shall the baseline year be later than the 1994 reporting year. The baseline amount as to which the 50 percent reduction goal applies shall be the aggregate amount of toxic pollutants reported by the agency in the baseline year. For any toxic pollutants included by the agency in determining its baseline under this section, in addition to toxic chemicals under EPCRA, the agency shall report on such toxic pollutants annually under the provisions of section 3-304 of this order, if practicable, or through an agency report that is made available to the public.

(d) The head of each Federal agency shall ensure that each of its covered facilities develops a written pollution prevention plan no later than the end of 1995, which sets forth the facility's contribution to the goal established in section 3-302(a) of this order. Federal agencies shall conduct assessments of their facilities as necessary to ensure development of such plans and of the facilities' pollution prevention programs.

3-303. Acquisition and Procurement Goals. (a) Each Federal agency shall establish a plan and goals for eliminating or reducing the unnecessary acquisition by that agency of products containing extremely hazardous substances or toxic chemicals. Similarly, each Federal agency shall establish a plan and goal for voluntarily reducing its own manufacturing, processing, and use of extremely hazardous substances and toxic chemicals. Priorities shall be developed by Federal agencies, in coordination with EPA, for implementing this section.

(b) Within 24 months of the date of this order, the Department of Defense (DOD) and the General Services Administration (GSA), and other agencies, as appropriate, shall review their agency's standardized documents, including specifications and standards, and identify opportunities to eliminate or reduce the use by their agency of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of their agency mission. The EPA shall assist agencies in meeting the requirements of this section, including identifying substitutes and setting priorities for these reviews. By 1999, DOD, GSA and other affected agencies shall make all appropriate revisions to these specifications and standards.

(c) Any revisions to the Federal Acquisition Regulation (FAR) necessary to implement this order shall be made within 24 months of the date of this order.

(d) Federal agencies are encouraged to develop and test innovative pollution prevention technologies at their facilities in order to encourage the development of strong markets for such technologies. Partnerships should be encouraged between industry, Federal agencies, Government laboratories, academia, and others to assess and deploy innovative environmental technologies for domestic use and for markets abroad.

3-304. Toxics Release Inventory/Pollution Prevention Act Reporting. (a) The head of each Federal agency shall comply with the provisions set forth in section 313 of EPCRA, section 6607 of PPA, all implementing regulations, and future amendments to these authorities, in light of applicable guidance as provided by EPA.

(b) The head of each Federal agency shall comply with these provisions without regard to the Standard Industrial Classification (SIC) delineations that apply to the Federal agency's facilities, and such reports shall be for all releases, transfers, and wastes at such Federal agency's facility without regard to the SIC code of the activity leading to the release, transfer, or waste. All other existing statutory or regulatory limitations or exemptions on the application of EPCRA section 313 shall apply to the reporting requirements set forth in section 3-304(a) of this order.

(c) The first year of compliance shall be no later than for the 1994 calendar year, with reports due on or before July 1, 1995.

3-305. *Emergency Planning and Community Right-to-Know Reporting Responsibilities.* The head of each Federal agency shall comply with the provisions set forth in sections 301 through 312 of EPCRA, all implementing regulations, and future amendments to these authorities, in light of any applicable guidance as provided by EPA. Effective dates for compliance shall be: (a) With respect to the provisions of section 302 of EPCRA, emergency planning notification shall be made no later than 7 months after the date of this order.

(b) With respect to the provisions of section 303 of EPCRA, all information necessary for the applicable Local Emergency Planning Committee (LEPC's) to prepare or revise local Emergency Response Plans shall be provided no later than 1 year after the date of this order.

(c) To the extent that a facility is required to maintain Material Safety Data Sheets under any provisions of law or Executive order, information required under section 311 of EPCRA shall be submitted no later than 1 year after the date of this order, and the first year of compliance with section 312 shall be no later than the 1994 calendar year, with reports due on or before March 1, 1995.

(d) The provisions of section 304 of EPCRA shall be effective beginning January 1, 1994.

(e) These compliance dates are not intended to delay implementation of earlier timetables already agreed to by Federal agencies and are inapplicable to the extent they interfere with those timetables.

Sec. 4-4. Agency Coordination.

4-401. By February 1, 1994, the Administrator shall convene an Interagency Task Force composed of the Administrator, the Secretaries of Commerce, Defense, and Energy, the Administrator of General Services, the Administrator of the Office of Procurement Policy in the Office of Management and Budget, and such other agency officials as deemed appropriate based upon lists of potential participants submitted to the Administrator pursuant to this section by the agency head. Each agency head may designate other senior agency officials to act in his/her stead, where appropriate. The Task Force will assist the agency heads in the implementation of the activities required under this order.

4-402. Federal agencies subject to the requirements of this order shall submit annual progress reports to the Administrator beginning on October 1, 1995. These reports shall include a description of the progress that the agency has made in complying with all aspects of this order, including the pollution reductions requirements. This reporting requirement shall expire after the report due on October 1, 2001.

4-403. *Technical Advice.* Upon request and to the extent practicable, the Administrator shall provide technical advice and assistance to Federal agencies in order to foster full compliance with this order. In addition, to the extent practicable, all Federal agencies subject to this order shall provide technical assistance, if requested, to LEPC's in their development of emergency response plans and in fulfillment of their community right-to-know and risk reduction responsibilities.

4-404. Federal agencies shall place high priority on obtaining funding and resources needed for implementing all aspects of this order, including the pollution prevention strategies, plans, and assessments required by this order, by identifying, requesting, and allocating funds through line-item or direct funding requests. Federal agencies shall make such requests as required in the Federal Agency Pollution Prevention and Abatement Planning Process and through agency budget requests as outlined in Office of Management and Budget (OMB) Circulars A-106 and A-11, respectively. Federal agencies should apply, to the maximum extent practicable, a life cycle analysis and

total cost accounting principles to all projects needed to meet the requirements of this order.

4-405. *Federal Government Environmental Challenge Program.* The Administrator shall establish a "Federal Government Environmental Challenge Program" to recognize outstanding environmental management performance in Federal agencies and facilities. The program shall consist of two components that challenge Federal agencies: (a) to agree to a code of environmental principles to be developed by EPA, in cooperation with other agencies, that emphasizes pollution prevention, sustainable development and state-of-the-art environmental management programs, and (b) to submit applications to EPA for individual Federal agency facilities for recognition as "Model Installations." The program shall also include a means for recognizing individual Federal employees who demonstrate outstanding leadership in pollution prevention.

Sec. 5-5. *Compliance.*

5-501. By December 31, 1993, the head of each Federal agency shall provide the Administrator with a preliminary list of facilities that potentially meet the requirements for reporting under the threshold provisions of EPCRA, PPA, and this order.

5-502. The head of each Federal agency is responsible for ensuring that such agency take all necessary actions to prevent pollution in accordance with this order, and for that agency's compliance with the provisions of EPCRA and PPA. Compliance with EPCRA and PPA means compliance with the same substantive, procedural, and other statutory and regulatory requirements that would apply to a private person. Nothing in this order shall be construed as making the provisions of sections 325 and 326 of EPCRA applicable to any Federal agency or facility, except to the extent that such Federal agency or facility would independently be subject to such provisions. EPA shall consult with Federal agencies, if requested, to determine the applicability of this order to particular agency facilities.

5-503. Each Federal agency subject to this order shall conduct internal reviews and audits, and take such other steps, as may be necessary to monitor compliance with sections 3-304 and 3-305 of this order.

5-504. The Administrator, in consultation with the heads of Federal agencies, may conduct such reviews and inspections as may be necessary to monitor compliance with sections 3-304 and 3-305 of this order. Except as excluded under section 6-601 of this order, all Federal agencies are encouraged to cooperate fully with the efforts of the Administrator to ensure compliance with sections 3-304 and 3-305 of this order.

5-505. Federal agencies are further encouraged to comply with all state and local right-to-know and pollution prevention requirements to the extent that compliance with such laws and requirements is not otherwise already mandated.

5-506. Whenever the Administrator notifies a Federal agency that it is not in compliance with an applicable provision of this order, the Federal agency shall achieve compliance as promptly as is practicable.

5-507. The EPA shall report annually to the President on Federal agency compliance with the provisions of section 3-304 of this order.

5-508. To the extent permitted by law and unless such documentation is withheld pursuant to section 6-601 of this order, the public shall be afforded ready access to all strategies, plans, and reports required to be prepared by Federal agencies under this order by the agency preparing the strategy, plan, or report. When the reports are submitted to EPA, EPA shall compile the strategies, plans, and reports and make them publicly available as well. Federal agencies are encouraged to provide such strategies, plans, and reports to the State and local authorities where their facilities are located for an additional point of access to the public.

Sec. 6-6. Exemption.

6-601. In the interest of national security, the head of a Federal agency may request from the President an exemption from complying with the provisions of any or all aspects of this order for particular Federal agency facilities, provided that the procedures set forth in section 120(j)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9620(j)(1)), are followed. To the maximum extent practicable, and without compromising national security, all Federal agencies shall strive to comply with the purposes, goals, and implementation steps set forth in this order.

Sec. 7-7. General Provisions.

7-701. Nothing in this order shall create any right or benefit, substantive or procedural, enforceable by a party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

William Clinton

THE WHITE HOUSE,
August 3, 1993.

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APPENDIX O

Section 313, Water Priority
Chemicals Listing

Section 313, Water Priority Chemicals Listing

Section 313 Water Priority Chemicals

CAS number	Common name
75-07-0	Acetaldehyde
75865	Acetane cynohydrin
107-02-8	Acrolein
107-13-1	Acrylonitrile
309-00-2	Aldrin [1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10, 10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha., 4.alpha.,4a.beta., 5.alpha.,8.alpha.,8a.beta.)-]
107-06-1	Allyl Chloride
7429-90-5	Aluminum (fume or dust)
7664-41-7	Ammonia
62-53-3	Aniline
120-12-7	Anthracene
7440-38-0	Antimony
7647189	Antimony pentachloride
28300745	Antimony potassium tartrate
7789619	Antimony tribromide
10025919	Antimony trichloride
7783564	Antimony trifluoride
1309644	Antimony trioxide
7440-39-2	Arsenic
1303328	Arsenic disulfide
1303282	Arsenic pentoxide
7784341	Arsenic trichloride
1327533	Arsenic trioxide
1303339	Arsenic trisulfide
1332-21-4	Asbestos (friable)
542821	Barium cyanide
71-43-2	Benzene
92-87-5	Benzidine
100470	Benzonitrile
98-88-4	Benzoyl chloride
100-44-7	Benzyl chloride
7440-41-7	Beryllium
7787475	Beryllium chloride
7787497	Beryllium fluoride
7787555	Beryllium nitrate
111-44-4	Bis(2-chloroethyl) ether
75-25-2	Bromoform
74-83-9	Bromomethane (Methyl bromide)
85-88-7	Butyl benzyl phthalate
7440-43-9	Cadmium
543908	Cadmium acetate
7789426	Cadmium bromide
10106642	Cadmium chloride
7778441	Calcium arsenate
52740166	Calcium arsenite
13765190	Calcium chromate
582018	Calcium cyanide
133-08-2	Captaf [1H-isoindole-1,3(2H)-dione,3a,4,7,7a-tetrahydro-2-[[trichloromethyl]thio]-]
63-25-2	Carbaryl [1-Naphthalenol, methylcarbamate]
75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
57-74-9	Chlordane [4,7-Methanoindan,1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-]
7782-50-5	Chlorine
59-50-7	Chloro-4-methyl-3-phenol <i>p</i> -Chloro- <i>m</i> -cresol
106-90-7	Chlorobenzene
75-00-3	Chloroethane (Ethyl chloride)
67-66-3	Chloroform
74-87-3	Chloromethane (Methyl chloride)

Section 313 Water Priority Chemicals (Continued)

CAS number	Common name
95-57-8	2-Chlorophenol
106-48-9	4-Chlorophenol
1086304	Chromic acetate
11115745	Chromic acid
10101538	Chromic sulfate
7440-47-3	Chromium
1308-14-1	Chromium (Tri)
10049055	Chromous chloride
7789437	Cobaltous bromide
544183	Cobaltous formate
14017415	Cobaltous sulfamate
7440-50-8	Copper
106-39-4	<i>m</i> -Cresol
9548-7	<i>o</i> -Cresol
106-44-5	<i>p</i> -Cresol
1319-77-3	Cresol (mixed isomers)
142712	Cupric acetate
12002038	Cupric acetoarsenite
7447394	Cupric chloride
3251238	Cupric nitrate
5893663	Cupric oxalate
7758967	Cupric sulfate
10380297	Cupric sulfate, ammoniated
815627	Cupric tartrate
57-12-5	Cyanide
508774	Cyanogen chloride
110-82-7	Cyclohexane
94-75-7	2,4-D [Acetic acid, (2,4-dichlorophenoxy)-]
106-83-4	1,2-Dibromoethane (Ethylene dibromide)
84-74-2	Dibutyl phthalate
25321-22-6	Dichlorobenzene (mixed isomers)
95-50-1	1,2-Dichlorobenzene
541-73-1	1,3-Dichlorobenzene
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
75-27-4	Dichlorobromomethane
107-06-2	1,2-Dichloroethane (Ethylene dichloride)
540-59-0	1,2-Dichloroethylene
120-83-2	2,4-Dichlorophenol
78-67-5	1,2-Dichloropropane
542-75-6	1,3-Dichloropropylene
62-73-7	Dichlorvos [Phosphoric acid, 2,2-dichloroethenyl dimethyl ester]
115-32-2	Dicofol [Benzenemethanol, 4-chloro-.alpha.-(4-chlorophenyl)-.alpha.-(trichloromethyl)-]
177-81-7	Di-(2-ethylhexyl phthalate (DEHP)
84-66-2	Diethyl phthalate
105-67-9	2,4-Dimethylphenol
131-11-3	Dimethyl phthalate
534-52-1	4,6-Dinitro- <i>o</i> -cresol
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
606-20-2	2,6-Dinitrotoluene
117-84-0	<i>n</i> -Dioctyl phthalate
122-60-7	1,2-Diphenylhydrazine (Hydrazobenzene)
106-69-8	Epichlorohydrin
100-41-4	Ethylbenzene
106934	Ethylene dibromide
50-00-0	Formaldehyde
76-44-8	Heptachlor [1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene]
116-74-1	Hexachlorobenzene
67-68-3	Hexachloro-1,3-butadiene
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane

Section 313 Water Priority Chemicals (Continued)

CAS number	Common name
7647-01-0	Hydrochloric acid
74-90-8	Hydrogen cyanide
7664-39-3	Hydrogen fluoride
7439-92-1	Lead
301042	Lead acetate
7764409	Lead arsenate
7645252	Do.
10102484	Do.
7758954	Lead chloride
13814965	Lead fluoborate
7783462	Lead fluoride
10101630	Lead iodide
10099748	Lead nitrate
7428480	Lead stearate
1072351	Do.
52852592	Do.
7446142	Lead sulfate
1314870	Lead sulfide
592870	Lead thiocyanate
58-89-9	Lindane [Cyclohexane, 1,2,3,4,5,6-hexachloro-(1.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-]
14307358	Lithium chromate
108-31-6	Maleic anhydride
592041	Mercuric cyanide
10045940	Mercuric nitrate
7783359	Mercuric sulfate
592858	Mercuric thiocyanate
7782867	Mercurous nitrate
7439-97-8	Mercury
72-43-8	Methoxychlor [Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-]]
80-82-6	Methyl methacrylate
91-20-3	Naphthalene
7440-02-0	Nickel
18699180	Nickel ammonium sulfate
37211058	Nickel chloride
7718549	Do.
12084487	Nickel hydroxide
14216752	Nickel nitrate
7786814	Nickel sulfate
7697-37-2	Nitric acid
98-95-3	Nitrobenzene
88-75-5	2-Nitrophenol
100-02-7	4-Nitrophenol
62-75-9	<i>N</i> -Nitrosodimethylamine
86-30-6	<i>N</i> -Nitrosodiphenylamine
621-64-7	<i>N</i> -Nitrosodi- <i>n</i> -propylamine
56-38-2	Parathion [Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester]
87-86-5	Pentachlorophenol (PCP)
106-95-2	Phenol
75-44-5	Phosgene
7664-38-2	Phosphoric acid
7723-14-0	Phosphorus (yellow or white)
1336-36-3	Polychlorinated biphenyls (PCBs)
7784410	Potassium arsenate
10124502	Potassium arsenite
7778509	Potassium bichromate
7789006	Potassium chromate
151508	Potassium cyanide
75-56-9	Propylene oxide
91-22-5	Quinoline

Section 313 Water Priority Chemicals (Continued)

CAS number	Common name
7782-49-2	Selenium
7440084	Selenium oxide
7440-22-4	Silver
7761888	Silver nitrate
7631892	Sodium arsenate
7784465	Sodium arsenite
10588019	Sodium bichromate
7775113	Sodium chromate
143339	Sodium cyanide
10102168	Sodium selenite
7782823	Do.
7789062	Strontium chromate
100-42-5	Styrene
7664-93-9	Sulfuric acid
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethylene (Perchloroethylene)
935-95-5	2,3,5,6-Tetrachlorophenol
78002	Tetraethyl lead
7440-28-0	Thallium
10031591	Thallium sulfate
106-88-3	Toluene
8001-35-2	Toxaphene
52-68-6	Trichlorfon [Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-dimethylester]
120-28-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
95-95-4	2,4,5-Trichlorophenol
68-08-2	2,4,6-Trichlorophenol
7440-62-2	Vanadium (fume or dust)
106-05-4	Vinyl acetate
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride
106-38-3	<i>m</i> -Xylene
95-47-6	<i>o</i> -Xylene
106-42-3	<i>p</i> -Xylene
1330-20-7	Xylene (mixed isomers)
7440-66-6	Zinc (fume or dust)
557348	Zinc acetate
14639975	Zinc ammonium chloride
14639986	Do.
52828258	Do.
1332076	Zinc borate
7609458	Zinc bromide
3486359	Zinc carbonate
7846857	Zinc chloride
557211	Zinc cyanide
7783495	Zinc fluoride
557415	Zinc formate
7779864	Zinc hydrosulfite
7779866	Zinc nitrate
127822	Zinc phenolsulfonate
1314847	Zinc phosphide
16671719	Zinc silicofluoride
7733020	Zinc sulfate

APPENDIX P

Army Environmental Center's
Reason Codes for Notices
of Violation

Army Environmental Center's Reason Codes for Notices of Violation¹

Table P-1.
Reason Code Definitions

Code	Code Definition
10	Exceedances
11	Volatile organic compounds (VOCs)
12	Visible
13	SDWA and drinking water standards
14	Required notifications
15	Inadequate levels of
16	NPDES and pretreatment limits
17	Emission limits, fuel use, miscellaneous
18	Unauthorized use of
19	Unreported exceedances
20	Technical work
21	Sampling, analysis, monitoring errors/failures
22	Calibration problems
23	Lab errors/failures/certification requirements
30	Personnel issues
31	Uncertified personnel
32	Inadequate supervision certification
33	Training: inadequate/not done
34	Operator training (not environmental staff)
35	Inadequate number of personnel
40	Operations
41	Unpermitted/unauthorized/unregistered activity/equipment
42	Records/files data submissions (incomplete/late)
43	Labeling/placard deficiencies

Note: SDWA = Safe Drinking Water Act; NPDES = National Pollutant Discharge Elimination System; O&M = operations and maintenance; LDR = Land Disposal Restriction; UST = underground storage tank.

¹From *Deriving Management Information from Environmental Notices of Violation*, October 1992, LMI Report AR202RD4, D. Brown, H. Hassrick, R. Baxter.

Table P-1.
Reason Code Definitions (Continued)

Code	Code Definition
44	Storage/accumulation issues (time, volume)
45	General O&M failures
46	Faulty/missing equipment
47	Manifest/transport problems, LDR Certification
48	Nonlisted/restricted wastes activities
49	Inspections/engineering certification
50	Spills/leaks/discharges
51	Unauthorized discharge/disposal
52	Leak/spill from container/UST
53	Bypass or overflow
54	Contamination from spill/leak/discharge — not cleaned up
55	Procedural error causing spill or pollution
56	Not used
57	Spill, etc., not reported
60	Facilities problems
61	Facility design or capabilities
62	Monitoring/detection/control systems
63	Hazardous waste treatment, storage, or disposal
64	Underground storage tanks
70	General management
71	Reports
72	Security and safety
73	Forms, documents, plans, manuals, procedures — inadequate/incomplete (but not operating records, covered under code 42)
74	Fees not paid
75	Failure to respond to regulatory authority notice
80	Legal agreements (and other legal obligations)
81	Not in accordance with (IAW) compliance agreement
82	Late in achieving compliance agreement milestone
83	Not IAW closure plans
84	Late with closure milestones
85	Not IAW permit/plan/schedule/other legal requirements
86	Late with permit/plan/schedule/other milestone

Note: SDWA = Safe Drinking Water Act; NPDES = National Pollutant Discharge Elimination System; O&M = operations and maintenance; LDR = Land Disposal Restriction; UST = underground storage tank.

DETAILED DEFINITIONS OF REASON CODES

10. *EXCEEDANCES*
11. *Volatile Organic Compounds (VOCs)* – Violation of permit conditions or regulation/statute limiting VOC emissions.
12. *Visible* – Violation of opacity limits in stationary source exhaust emissions.
13. *Safe Drinking Water Act (SDWA) (Drinking Water Standards)* – Violations of primary drinking water standard, maximum contaminant levels (MCLs).
14. *Required Notifications* – Failure to provide exceedance notifications to the public or regulatory agency where required by permit or regulation/ statute. This type of violation is a feature of the SDWA and requires public water system operators to notify customers of MCL violations.
15. *Inadequate levels of* – Failure to maintain mandated chemical concentrations in such facilities as public drinking water systems. This violation occurs under the SDWA when required levels of disinfectants such as chlorine are not maintained at a residual level necessary to maintain bacteriological quality requirement. It also includes cases of excessive levels where the requirement establishes an upper limit as well as a lower limit (chlorine being such a case).
16. *National Pollutant Discharge Elimination System (NPDES) and Pretreatment Limits* – violations of NPDES permit conditions of pretreatment permit requirements designated by a local, publicly-owned treatment works (POTW).
17. *Emission Limits (Misc.), Fuel Use* – Violation of contaminant level emission limits established by permit or regulation other than those already noted in this section. This category of exceedance also includes violations of limits on fuel (oil, coal, etc.) quality with respect to sulfur or other constituents set by Federal, state, and local agencies.
18. *Unauthorized Use of* – Utilization of surface coatings, thinners, etc. prohibited by permit or regulation.
19. *Unreported Exceedance* – Failure to report discharge/emission exceedance to specified regulatory agency as required per permit or regulation.

20. TECHNICAL WORK

21. *Sampling, Analysis, Monitoring Errors/Failures* – Failure to perform sampling, analysis, and monitoring in accordance with proscribed procedures or permit criteria for such media as solid waste, air, water, and wastewater. This reason code also includes compliance with monitoring protocol for groundwater monitoring wells, and underground storage tanks (USTs) as well as chain of custody procedures.
22. *Calibration Problems* – Failure to utilize analytical equipment calibrated according to established criteria, or failure to conduct required calibrations. Where the deficiency is a failure to maintain the required records, but the calibrations were in fact performed, use code no. 42.
23. *Lab Errors/Failures/Certification Requirements* – Improper laboratory techniques relative to preservation and analysis of samples. This reason code also includes use of an uncertified lab as well as failure of a laboratory to meet state or Federal criteria for sample handling and analysis. Inspection deficiencies relative to standard procedures used by a lab are also included in this violation reason code.

30. PERSONNEL ISSUES

31. *Uncertified Personnel* – Failure to use certified personnel for specific functions as required by regulatory agency(s). Examples include asbestos removal/remediation personnel or wastewater treatment system operators. Inadequate certification records should use code no. 42.
32. *Inadequate Supervision (approved/certified)* – Failure to have properly certified supervision on-site for specified operations; e.g., asbestos removal/remediation, wastewater treatment operations supervision (normally is at least one level of certification higher than supervised personnel operating the wastewater treatment plant).
33. *Training: Inadequate/Not done* – Failure to train environmental staff personnel in the performance of their duties as specified by applicable Federal/state/local requirements. This reason code also includes inadequate training, or failure to conduct annual refresher training. Lack of training records should use code no. 42; failure to have certification training, resulting in uncertified personnel, should use code no. 31.
34. *Operator Training (Not environmental staff)* – Failure to train personnel outside of environmental staff organization. This may include Defense Reutilization and Marketing Office (DRMO) or other personnel handling hazardous wastes, or Directorate of Engineering and Housing personnel in waste or water treatment plants, landfills, etc.

35. *Inadequate Number of Personnel* – Failure to provide personnel in sufficient quantity so as to comply with permit conditions for an operation such as a sanitary landfill. State regulations may also set personnel requirements for other operations subject to environmental regulation.
40. *OPERATIONS*
41. *Unpermitted/Unauthorized/Unregistered Activity or Equipment* – This reason code includes such violations as failure to obtain permits for equipment or operations such as boilers, paint spray booths, asbestos removal operations, and discharge of a pollutant as well as operations not identified in permit applications such as the Resources Conservation and Recovery Action (RCRA) "A" permit. The prime focus of this reason code is on operations for which a construction and/or operating permit or registration was not obtained for a unit currently in operation. See also code no. 51.
42. *Records/Files/Data Submissions (Incomplete/Late)* – This code provides for violations concerning operating records, files, etc. not maintained in accordance with regulations, to include incomplete or late submittal. Examples of record keeping requirements subject to this code include maintaining manifest copies, land disposal restriction (LDR) certifications, operating records of open burning/open detonation (OB/OD) and other treatment/disposal operations, inspection logs, polychlorinated biphenyl (PCB) item inspection record, training records, etc. Discharge monitoring reports (DMRs) are also subject to this reason code.
43. *Labeling/Placard Deficiencies* – Included in this reason category are violations of regulations requiring labeling for containers, storage areas, and facility boundaries as well as placard deficiencies for vehicles transporting hazardous waste/materials. Violations include failure to label, improper or inaccurate labeling, no placards on hazardous waste transport vehicles, as well as illegible labeling.
44. *Storage/Accumulation Issues (Time, Volume)* – This violation code addresses violations related to storage and/or accumulation of hazardous waste. Typical examples of this violation code include storage beyond permitted volume or time limits, failure to indicate accumulation or storage start dates on containers, or storage not in accordance with recognized standards for incompatibility.
45. *General Operations and Maintenance (O&M) Failures* – This reason code concerns those violations of an operational and maintenance nature that do not readily meet criteria for classification into alternative codes. Many of these are housekeeping items such as use of defective containers, failure to close hazardous waste (HW) containers, poor little control at a landfill, lack of proper aisle space in storage areas (see code no. 72), as well as lack of maintenance of pollution control equipment (e.g., bag-houses).

46. *Faulty/Missing Equipment* – This reason code is designated for violations resulting from inoperative, poorly designated or nonexistent equipment needed to meet permit conditions, regulatory requirements, or prevent releases of pollutants to the environment.
47. *Manifest/Transport Problem/Land Disposal Restriction (LDR) Certification* – This code provides for violations in which the manifesting and/or transport of hazardous wastes for the purpose of recycling treatment or disposal is not in accordance with regulations. It does not include record keeping issues (violation code no. 42), but it does include improper preparation of the manifest. Manifest discrepancies including LDR certification requirements as well as transport violations (vehicle not certified for HW transport) are typical of violations to be included in this category.
48. *Nonlisted/Restricted Waste Activities* – This category of violation is designated for specific hazardous waste stream activities such as generation, storage, treatment that do not appear on the installation permit, notification of hazardous waste activity forms, or permit applications. For instance, where an installation is storing a waste that is not listed on a Part "A" permit or final permit, the violation would be reason code no. 48. In addition, when an installation has failed to properly identify and treat restricted wastes as required by regulations, the same reason code would be used.
49. *Inspections/Engineering Certification* – Violations included within this code result from failure to perform inspections required in permits or by Federal/state/local regulations. This code would also be used for failure to obtain engineering certification of structural integrity/proper system installation prior to use of certain waste management units, such as tanks.
50. *SPILLS/LEAKS/DISCHARGES* – The events classified under these codes should be significant departure from permitted standards, as opposed to minor daily exceedances envisioned in code nos. 10 - 19.
51. *Unauthorized discharge/disposal* – This violation code indicates that *discharges* or *disposal* of regulated substance(s) has occurred without proper permits and in violation of Federal, state, or local regulations. Examples would include discharges to "waters of the U.S." without a permit, or failure to properly dispose of materials such as PCBs. Do not include unauthorized emissions from point sources in this category (code no. 41). The essence of this code is that an entire environmental program is completely unpermitted (e.g., no air permit at all) or that specific discharge occurred. Note that code no. 41 applies to specific activities or equipment found to be without permits within a generally permitted program.
52. *Leak/Spill from Container/UST* – Leaks, spills, or discharges of hazardous substances from drums, USTs, or other storage vessels into the soil,

surface water, or groundwater are the most common violations to be coded in this category.

53. *Bypass or Overflow* – This code includes cases where the volume of waste overloads the containment system. Violations include bypass of wastewater or industrial waste treatment operations, or spills resulting from tank overflow. It also includes “upsets” – temporary failures of equipment that result in excessive discharges for a short period.
54. *Contamination from Spills/Leaks/Discharges not cleaned up* – This code is employed for violations resulting from inadequate spill cleanup or remediation as well as failure to respond to spills resulting in contamination of soil and groundwater. The original spills themselves are covered by other codes in this 50 category.
55. *Procedural Error Causing Spill or Population* – Violations coded in this category result from deficient operational procedures that result in soil and/or water contamination. Examples include land management activities that do not allow for erosion control measures, or open burning unit operational procedures that fail to prevent contaminant release into adjacent soil or groundwater.
56. Not used.
57. *Spills, etc., not reported* – This violation reason code primarily refers to spills, releases, etc., that are either not reported in a timely manner as defined by regulation. This code overrides all other codes in the 50 series.
60. *FACILITIES PROBLEMS*
61. *Facility design or capabilities* – This violation reason code encompasses generic design deficiencies for a variety of installation structures, systems, or resources. Included as examples are inadequate cross-connection or backflow prevention systems, inadequate supply of potable water, inefficient sewage treatment system, and other cases of inadequate capability, capacity, or containment as a result of the facility design. Hazardous waste facilities are covered separately under code no. 63.
62. *Monitoring/detection/control systems* – This reason code is to be used where systems designed to monitor environmental contamination, provide automatic detection of leaks from units such as USTs, or to control liquid levels either have not been installed or are not operating properly. Examples include failure to properly design and install groundwater monitoring wells, failure to maintain erosion control measures, inadequate tank level monitoring system, and failure to install interstitial leak detection system.
63. *Hazardous waste treatment, storage, or disposal systems* – This reason code applies to design deficiencies for *hazardous waste* treatment, storage, or

disposal facilities. This can include tanks, impoundments, storage areas, oil/water separators, etc. The most common violations for this code include lack of secondary containment, structural flaws in storage areas, lack of runoff control for waste piles, or defects in impoundment liners or berms.

64. *UST* – UST design deficiencies or operational capability issues are included in this violation reason code. Deficiencies relative to design requirements can be assessed given Federal/state/local regulations for USTs. Common findings include inadequate cathodic protection, lack of overflow protection, failure to provide vapor phase I or phase II recovery and failure to provide pressure testing. Ancillary devices, such as lead detection systems in interstitial spaces should be coded under item no. 62 (monitoring/detection/control systems). This code (64) pertains primarily to as-built or modified structural items relating to corrosion protection, tank tightness, and fill pipe location, etc.
70. *GENERAL MANAGEMENT*
71. *Reports* – This reason code refers to general failures to submit required reports. These include reports required by Federal/state/local agencies pertaining to RCRA, the Toxic Substances Control Act, the Clean Water Act, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This should not include individual DMRs that were sent in late or were incomplete, since these reports are sent in frequently enough to indicate an operational deficiency as opposed to general management deficiencies; occasional late or incomplete DMRs belong in reason code no. 42. However, consistently inadequate DMRs, or outright *failure* to submit DMRs, indicate management deficiencies and as such should be coded as 71. Other report violations to be classified as reason code no. 71 include failure to comply with public notification requirements, annual PCB reports, annual hazardous waste assessment reports or reports related to groundwater monitoring operations that are part of CERCLA or RCRA corrective action.
72. *Security and safety* – Violation reasons coded no. 72 primarily consist of failure to provide personal protection equipment, equipment to be utilized in response to emergencies and other items related to providing for employee safety and health as detailed in an installation contingency plan. Other common findings of violations with this code include inadequate aisle space for egress (see code no. 45), failure to post hazardous waste management areas, and failure to coordinate emergency response plans with local agencies such as police and fire departments.
73. *Forms, documents, plans, procedures, manuals (but not operating records)* – This reason code covers the failure to submit timely or adequate documentation, plans, procedures, etc., required by regulatory agencies on environmental issues of concern that require agency authorization, oversight, or approval. These documents also describe

procedures in effect at an installation designed to ensure compliance with environmental agency regulations. Forms, plans, and documents of consequence per this code include waste analysis plans, contingency plans, closure and post closure plans, part "A" and "B" permit applications, financial assurance documentation, groundwater sampling plans, asbestos containing material project notices, waste disposal documentation, Spill Prevention and Control Contingency plans, or other documents required in order to be allowed to have a permitted program but not of themselves essential to proper operation of environmental activities. Operating records/plans violations are not to be recorded here (see code no. 42).

74. *Fees not paid* – This reason code identifies violations that are issued solely to document the failure to pay fees such as those required for permits, registration fees (USTs), or HW assessment fees.
75. *Failure to respond to regulatory agency notice* – Receipt of a violation due to lack of response to a prior violation notice that required action on the installation's part within a specified period of time.
80. *LEGAL AGREEMENTS (AND OTHER LEGAL OBLIGATIONS, PERMITS, AND PLAN REQUIREMENTS)*
81. *Not in accordance with (IAW) compliance agreement* – This reason code applies to violations that result from failure to correct a violation in accordance with the dictates of a compliance agreement.
82. *Late in achieving compliance agreement milestone* – This reason code applies to violations that result from failure to achieve a milestone per compliance agreement requirements.
83. *Not IAW closure plans* – Violations of this type occur when closure of specific operational units and structures is not completed according to closure plan specifications or requirements.
84. *Late in achieving closure plan milestone(s)* – Violations of this type occur when closure of specified operational units and structures is not completed in a timely manner in accordance with milestones in a closure plan.
85. *Not IAW permit, plan, schedule, and other legal requirements* – Violations of type occur when activities are conducted in a manner not in accordance with a permit, plan, or schedule agreed to by an installation and regulatory agency. Exceedances and procedural violations are covered under code nos. 10 and 40; this code addresses failure to act as agreed by a legal document other than a "compliance agreement."
86. *Late in achieving permit, plan, and schedule milestone(s)* – Violations of this type occur when projects are not achieved in a timely manner in

accordance with milestones in a permit, plan, or schedule agreed to by an installation and regulatory agency.

APPENDIX Q

Storm Water Contact List

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
9th ARCOM	Fox, Jimmy	ATTN: APIX-EN, 2058 Maluhia Road	Fort DeRussey	HI	96815-1977	808-438-1504	808-438-1860
9th ARCOM	Misko, Wayne	ATTN: APIX-EN, 2058 Maluhia Road	Fort DeRussey	HI	96815-1977	808-438-1504	808-438-1860
63rd ARCOM	Jandali, Edward	AFRC-ACA-EN; Bldg 7, 11200 Lexington Dr.	Los Alamitos	CA	90720-5001	310-795-2366	310-795-2861
63rd ARCOM	Moore, Richard	AFRC-ACA-EN; Bldg 7, 11200 Lexington Dr.	Los Alamitos	CA	90720-5001	310-795-2366	310-795-2861
65th ARCOM	Galvez-Ortiz, Jesus M.	ATTN: AFRC-APR-OE 1300 Area	Fort Buchanan	PR	00934-5000	809-273-3566	809-273-1836
77th ARCOM	Rockhill, Luman	ATTN: AFZF-EH-E CO 10th Min. Div. LI	Fort Drum	NY	13602-5097	315-772-6544	315-772-9154
77th ARCOM	Wells, Frederick P.	AFRC-ANY-SE; Bldg 200, Fort Totten	Fort Totten	NY	11359-1016	718-352-5766	718-352-5679
79th ARCOM	Costello, Stephen	AFRC-APA-EN; Bldg 176, Naval Air Station	Willow Grove	PA	19090-5110	215-443-1795	215-443-1666
79th ARCOM	Fritz, Stephen E.	AFRC-APA-EN; Bldg 176, Naval Air Station	Willow Grove	PA	19090-5110	215-443-1662	215-443-1666
81st ARCOM	Divinyi, Carl	AFRC-AGA-EN; 1514E Cleveland Avenue	East Point	GA	30344-6904	404-559-5924	404-559-6089
81st ARCOM	Martin, John	AFRC-AGA-EN; 1514E Cleveland Avenue	East Point	GA	30344-6904	404-559-5921	404-559-6089
83rd ARCOM	Staggs, David	AFRC-AOH-BO; Bldg 306, P.O. Box 16515	Columbus	OH	43216-5004	614-692-1936	614-692-1575
83rd ARCOM	Staggs, Rick	AFRC-AOH-BO; Bldg 306, P.O. Box 16515	Columbus	OH	43216-5004	614-692-1938	614-692-1575
86th ARCOM	Jennings, David	ATTN: AFRC-FM-DEE, 2160 S. J St.	Fort McCoy	WI	54656-5162	608-388-4786	608-388-4704
86th ARCOM	Orders, Louis	AFRC-AIL-EN; 7402 Roosevelt Road	Forest Park	IL	60130-2587	708-209-2597	708-209-1430
86th ARCOM	Reilly, Colleen	AFRC-AIL-EN; 7402 Roosevelt Road	Forest Park	IL	60130-2587	708-209-2597	708-209-1430
86th ARCOM	Stone, Dennis	ATTN: AFRC-FM-DEE, 2160 S. J St.	Fort McCoy	WI	54656-5162	608-388-4794	608-388-4704
88th ARCOM	Van Laanen, Mike	AFRC-AMN-EN; 506 Roer Circle	Fort Snelling	MN	55111-4066	612-725-5271	612-725-8040
89th ARCOM	Warren, Howard	AFRC-AKS-LG-E; 3130 George Washington Blvd	Wichita	KS	67210-1598	316-681-1759	316-652-2392
90th ARCOM	Durham, Clyde	AFRC-ATX-EN; 1920 Harry Wurzbach Hwy	San Antonio	TX	78209-6097	210-221-4062	210-841-5950
90th ARCOM	Lapinski, Al	AFRC-ATX-EN; 1920 Harry Wurzbach Hwy	San Antonio	TX	78209-6097	210-221-4062	210-841-5950
94th ARCOM	Kelly, Craig	AFRC-AMA-LG-EN; Bldg 1607, Hanscom Field	Hanscom Field	MA	01731-2128	508-796-6272	508-796-3699
94th ARCOM	Purvey, Gary, LTC	AFRC-AMA-LG-EN; Bldg 1607, Hanscom Field	Hanscom Field	MA	01731-5290	617-377-4601	617-377-9961
94th ARCOM	Wilmoi, Harry	AFRC-AMA-LG-EN; Bldg 1607, Hanscom Field	Hanscom Field	MA	01731-2128	508-796-6273	617-377-9961
96th ARCOM	Collins, Rod	ATTN: AFRC-AUT-EN Douglas Res. Cntr. Bldg 232	Salt Lake City	UT	84113-5067	801-584-4386	801-584-4087
96th ARCOM	Witte, Ted	ATTN: AFRC-APA-EN, Bldg 176, Naval Air Station	Willow Grove	PA	19090-5110	801-584-4386	801-584-4087
97th ARCOM	Edell, Bob	AFRC-AMD-EN; Bldg P-1251, Annapolis Rd (RT 176)	Fort Meade	MD	20755-5310	301-677-1411	301-674-6225
99th ARCOM	Baker, Stephen	AFRC-APP-EN; 5 Lobaugh Street	Oakdale	PA	15071-5001	412-777-1233	412-693-8883
99th ARCOM	Skaggs, Jerry	AFRC-APP-EN; 5 Lobaugh Street	Oakdale	PA	15071-5001	412-777-1232	412-693-8883
102nd ARCOM	Bridges, Tony	ATTN: AFRC-AMO-EN-E 4301 Goodfellow Blvd.	St. Louis	MO	63120-1794	314-263-1199	314-263-5372
120th ARCOM	Adair, Jim	Bldg 9810, Lee Road	Ft. Jackson	SC	29207-6070	803-751-7653	803-751-7598
120th ARCOM	Marcinak, Dana	Bldg 9810, Lee Road	Ft. Jackson	SC	29207-6070	803-751-4025	803-751-7598
121st ARCOM	Higgins, Jamie	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9217	205-940-2488
121st ARCOM	Johnson, Dale	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9300	205-940-9213

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
121st ARCOM	Losey, CPT John	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9300	205-940-9213
121st ARCOM	Munson, Mike	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9300	205-940-9213
122nd ARCOM	Carter, Ed	AFRC-AAR-CK-EN; 8000 Camp Robinson Road	North Little Rock	AR	72118-2206	501-771-7831	501-771-7919
122nd ARCOM	Rowell, Rhonda	AFRC-AAR-CK-EN; 8000 Camp Robinson Road	North Little Rock	AR	72118-2205	501-771-7831	501-771-7818
123rd ARCOM	Goode, Josh	AFRC-AIN-EN; Bldg 126	Fort Benj. Harrison	IN	46216-6400	317-549-5061	317-549-5066
124th ARCOM	Hidalgo, Carlito	AFRC-AWA-EN; 4575 36th Avenue West	Fort Lawton	WA	98199	206-281-3142	206-281-3599
124th ARCOM	Schuller, Steve	AFRC-AWA-EN; 4575 36th Avenue West	Fort Lawton	WA	98199	206-281-3142	206-281-3599
125th ARCOM	Harker, Peggy	AFRC-ATN-EN; 443 Donnellson Pike	Nashville	TN	37214-3558	615-885-8700	615-885-8767
Aberdeen Proving Grounds	LaFontain, Amy	STEAP-SH-E	APG	MD	21005-5001	410-278-4099	410-278-4291
Air Station Cape Cod	Cannon, Bob	Bldg. 5215	Otis ANCB	MA	02542	508-968-6487	508-968-6491
Anniston Army Depot	Milner, Kevin	SDSAN-DEL-RMD	Anniston	AL	36201	205-235-7189	205-235-7726
APG and Ordnance School	Katz, Keith			MD		410-278-3654	410-278-9014
Army Installations & Services Activity	Buske, Todd	ATTN: AMXEN-U	Rock Island	IL	61299-7190	309-782-8255	
Army USAMC Installns & Svc Activity	Stanuszek, Joseph	ATTN: AMZEN-U	Rock Island	IL	61299-7190	309-782-4732	
Arnold Air Force Base	Burns, Ruel	AEDC CEV; 100 Kindel Dr., St. B-314	Arnold AFB	TN		615-454-3296	615-454-6252
Camp Keys	Lajoie, Marleen	DFE, Bldg 8	Augusta	ME	04333-0033	207-626-4395	207-476-4553
Carlisle Barracks	Covall, Charles	ATZE-DIS	Carlisle Barracks	PA	17013-5002	717-245-3893	717-245-3713
Carlisle Barracks	Kelly, Tom	ATZE-DIS	Carlisle Barracks	PA	17013-5002	717-245-4040	717-245-4396
CERL	Dirakash, Temvar	P.O. Box 9000	Champaign	IL	61826-7003	217-373-3490	217-373-3488
CERL	Matherly, Joe	P.O. Box 9000	Champaign	IL	61826-7003	217-373-3490	217-373-3488
CERL	Scholze, Rick	P.O. Box 9000	Champaign	IL	61826-9000	217-373-3490	217-373-3488
CH2M Hill	Barton, Russ	2567 Fairlane Drive	Montgomery	AL	36116	205-271-1445	205-277-5763
Cmdr., TECOM	Kosko, Nancy	AMSTE-EQ	APG	MD	21005-5055	410-278-1083	
Dugway Proving Grounds	Milliken, Carol	Cmdr., DPG, ATTN: STEDP-EPO	Dugway	UT	84022-5000	801-831-3417	
DYNAMAC	Undrakonda, Apama	Maritime Center I; Suite 260	Baltimore	MD	21224	410-633-0980	410-633-0985
ESE	Perrich, Jerry	521 Byers Road, Suite 101	Miamisburg	OH	45342	513-859-3600	513-859-7951
ESE	Satafrio, Carl	521 Byers Road, Suite 101	Miamisburg	OH	45342	513-859-3600	513-859-7951
ESE	White, Brad	521 Byers Road, Suite 101	Miamisburg	OH	45342	513-859-3600	513-859-7951
Fitzsimmons Army Medical Center	Errett, Sue	HSGH-EH, Bldg 118, DEH	Aurora	CO	80045-5001	303-361-3526	303-361-3424
Fort A.P. Hill	Phillips, John R.	Fl. AP.P. Hill; ATTN: AFKA-FHE-E (Phillips)	Bowling Green	VA	22427	804-633-8255	804-633-8443
Fort Belvoir	Femlason, Robert W.	CEHSC-FU-S; Bldg. 358	Ft. Belvoir	VA	22060	703-704-1563	
Fort Belvoir	McLeod, Mel	CEHSC-FU-S; Bldg. 358	Ft. Belvoir	VA	22060	703-704-1548	
Fort Belvoir, Env & Nat Res Dev	Ghosh, Sue	ATTN: ANFB-EN Bldg. 1442	Ft. Belvoir	VA	22060-5114	703-806-4007	703-806-3246
Fort Belvoir	Schaefer, Tom	ATZI-IS	Ft. Benj. Harrison	IN	26216-5000	317-549-5388	317-549-5384

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
Fort Benning, USA Drb. Center	Wilkins, Joe	Env. Mgmt. Div.; ATTN: ATZB-PWN-P	Ft. Benning	GA	31905	706-545-2400	706-545-7814
Fort Bliss	Brach, Bob		Ft. Bliss	TX		915-568-1838	915-568-1333
Fort Bragg	Stancar, Joe	AFZA-PW-DV; Bldg 3-1933	Ft. Bragg	NC	28302	919-396-3341	919-396-5830
Fort Buchanan	Perez, Toney		Ft. Buchanan	PR		809-273-3508	809-273-3503
Fort Campbell	Sewell, Gary J.	HQ 101st Abn Div (AASLT) & Ft. Campbell; DEH Env. Div.	Ft. Campbell	KY	42223-1291	502-798-3487	502-798-3561
Fort Carson	Keltn, Nelson O.	AFZC-ECM-EC (Kelm)	Ft. Carson	CO	80913-5000	719-579-2022	719-526-1724
Fort Carson	Pilatzi, Richard	AFZC-ECM-EC	Ft. Carson	CO	80913-5000	719-526-2022	719-526-1724
Fort Chaffee	Coleman, Bob	ATZR-ZF	Ft. Chaffee	AR	72905-5000	501-484-2516	501-484-2230
Fort Detrick	Erbis, Henry	Cmdr. US Army Garrison; ATTN: HSHD-SHE	Fredrick	MD	21701	301-663-2555	301-343-2423
Fort Devens	Penta, Greg	29 Winfield Road	Holden	MA	01520	508-796-3779	508-796-3699
Fort Dix	Schwartz, Joseph J.	Directorate of Public Works, ATTN: AFZT-EHN; Bldg 5317	Ft. Dix	NJ	08840-5501	609-562-3050	609-562-5345
Fort Drum	Rockhill, Luman H.	Cmdr., HQ 10th Min. Div. (LI) & Ft. Drum; AE2S-EM-E	Ft. Drum	NY	13602-5097	315-772-4156	315-772-8050
Fort Drum	Zeilhofer, Loren	Cmdr., HQ 10th Min. Div. (LI) & Ft. Drum; AE2S-EM-E	Ft. Drum	NY	13602-5097	315-772-7178	315-772-8050
Fort Eustis	Newman, Bob	ATZF EH	Ft. Eustis	VA	23604-5332	804-878-3592	804-888-0171
Fort Gillem	Hines, David		Forest Park	GA		404-752-3702	404-752-4193
Fort Gordon	DeMoore, Christopher	ATZH-DIE, Bldg 2141, 11th Avenue	Ft. Gordon	GA	30905-5450	404-791-2403	706-791-8245
Fort Hamilton	Ruppert, Andrew	Dir. of Public Works; ATTN: AFZT-FHE-ENV; Bldg 129	Brooklyn	NY	11252-6800	718-630-4563	718-630-4608
Fort Hood	Kriegel, Mike	AFZF-DE-EPG	Ft. Hood	TX	76544	817-287-1343	817-287-3591
Fort Huachuca	Sieracki, Randy		Ft. Huachuca	AZ		602-533-3120	602-533-3043
Fort Hunter-Liggett	Stein-Freen, Daniel	CDR, 7th Inf Div & Ft Ord; ATTN: AFZQ-DE-ENRD; Bldg 4899	Ft. Ord	CA	93941-5777	408-242-2822	404-242-2047
Fort Indiantown Gap	Malick, Kenneth L.	Cmdr., ATTN: AFKA-ZQ-DE-E	Annnville	PA	17003	717-861-2634	717-861-2663
Fort Irwin	Dishart, Justine	Bldg. 385	Ft. Irwin	CA	92310-5000	619-386-3740	619-386-5293
Fort Jackson	Sammons, Carol	ATZJ-EH, Bldg. 2562	Ft. Jackson	SC	29207-5670	803-751-6845	803-751-6821
Fort Knox	McGar, Donnie	AZTK-EH; 77 Binter Street	Fort Knox	KY	40121-5000	502-624-3629	502-624-2151
Fort Leavenworth	Banks, Ron	ATZL-GEH	Ft. Leavenworth	KS	66027-5020	913-684-4132	913-432-0154
Fort Leavenworth	Matula, Emil	ATTN: ATZL-GEH	Ft. Leavenworth	KS	66027-5020	913-684-5661	913-684-5634
Fort Lee	Bartholomew, Kathleen	ATZM-EP	Ft. Lee	VA	23801-5200	804-734-5066	804-734-3474
Fort Lee	Richardson, Tim	ATZM-EP	Ft. Lee	VA	23801-5200	804-734-1420	804-796-6511
Fort Leonard Wood	Carter, Jim	ATZTAH-E; HQ-USA Eng. Center	Ft. Leonard Wood	MO	65473-5000	314-596-6108	314-596-6516
Fort Leonard Wood	Stenger, Carl	ATZTAH-E; HQ-USA Eng. Center	Ft. Leonard Wood	MO	65473-5000	314-596-0869	314-596-0868
Fort Lewis	Hamre, Mary	HQ I Corps; Ft. Lewis; ATTN: Roads & Sanitation Branch	Ft. Lewis	WA	98433-5000	206-967-5237	206-964-2488
Fort McClellan	Pinson, Karen	AZTN-E	Ft. McClellan	AL	36205-5000	205-848-3125	205-848-3517
Fort McClellan	Wang, Shih-Chi	AZTN-E	Ft. McClellan	AL	36205-5000	205-848-3758	205-848-5517
Fort McCoy	Stone, Dennis A.	Cmdr., HQ Ft. McCoy; ATTN: AFZR-DE-E, Bldg 2170	Sparta	WI	54656-5000	608-388-2160	608-388-4704

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
Fort McPherson	Hines, David	FCEN-CBE	Ft. McPherson	GA	30350-5000	404-752-3702	404-752-4193
Fort Meade	Marquardt, Donald J.	Environmental Mgmt Office; AFKA-ZI-AH-E	Ft. Meade	MD	20755-5115	301-677-9365	301-677-3129
Fort Meade	Sharma, Balwant	ATTN:ANME-PWE	Ft. Meade	MD	20755-5115	301-677-3549	301-677-3129
Fort Meade, 97th ARCOM	DiGiovanni, Joe	ATTN:ANME-PWE	Ft. Meade	MD	20755-5115	301-677-9648	301-677-9001
Fort Meade, 97th ARCOM	Edell, Bob	ATTN:ANME-PWE	Ft. Meade	MD	20755-5115	301-677-9648	301-677-9001
Fort Monmouth	Desai, Dinker	ATTN:SELFME-EH; Bldg 167	Ft. Monmouth	NJ	07703	908-532-1475	908-532-2367
Fort Monroe	Shivley, Mary	AZTC-EH	Ft. Monroe	VA	23651-6700	804-727-3269	804-727-3011
Fort Monroe	Sprock, Phyllis	AZTC-EH	Ft. Monroe	VA	23651-6700	804-727-5363	804-727-3011
Fort Myer	Bowman, John R.	ATTN: ANEN-E	Ft. Myer	VA		703-696-2010	703-696-8518
Fort Myer	Lane, Donald F.	ATTN: ANEN-E	Ft. Myer	VA		703-696-2010	
Fort Ord	Stein-Freen, Daniel D.	CDR, 7th Inf Div & Ft. Ord; ATTN: AFZO DE-ENRD; Bldg 4899	Ft. Ord	CA	93941-5777	408-242-2822	408-242-2047
Fort Parks	Hamre, Mary	HQ I Comps; Ft. Lewis; ATTN: Roads & Sanitation Branch	Ft. Lewis	WA	98433-5000	206-967-5237	206-964-2488
Fort Pickett	Foley, David	AFZA-PP-E, Ft. Pickett; Bldg. 234	Blackstone	VA	23824	804-292-2630	804-292-2518
Fort Polk	Grenmillon, Mark	USGS; AFZX-DE-E	Ft. Polk	LA	71459	318-531-6038	318-531-2604
Fort Richardson	Metz, Joseph	6th Inf Div (L) & US Army Garrison, AK; ATTN:L APVR-PW-EV	Ft. Richardson	AK	99505-5500	907-384-3042	
Fort Riley	Phillips, Ron	Directorate of Engr. & Housing; ATTN: AFZN-DE-VE; Bldg 1970	Ft. Riley	KS	66442-6016	913-239-8499	913-239-8535
Fort Ritchie	Hofmann, Bill	Bldg 603, Lakeside Drive	Ft. Ritchie	MD	21719-5010	301-878-4159	717-878-5349
Fort Rucker	Walker, Tom	ATZQ-DEH	Ft. Rucker	AL	3632-5000	205-255-5926	205-255-2058
Fort Sam Houston	Carbonell, Frank	AFZG-DE-ENRD	Ft. Sam Houston	TX	78213	210-221-4930	210-221-3410
Fort Shafter	Takamiya, George	Cmdr., USARPAC; ATTN: APEN-EV	Ft. Shafter	HI	96858-5100	808-438-0780	808-438-8688
Fort Sheridan	Nichols, Ron		Ft. Sheridan	IL		404-669-7688	404-669-7827
Fort Sill	Sasser, Will	ATZK-E	Ft. Sill	OK	73503-5100	405-442-3409	405-442-5722
Fort Stewart	Harris, George A.	HQ 24th Inf. Div. (M) & Ft. Stewart; ATTN: AFZP-DEV Bldg 739	Ft. Stewart	GA	31314-5000	912-767-2010	912-767-5916
Fort Story	Cochran, Mike		Ft. Story	VA	23604-5332	804-727-4241	804-888-0171
Fort Story	Newman, Bob	ATZF EH	Ft. Eustis	VA	23604-5332	804-727-4241	804-888-0171
Geo-Marine, Inc.	Sealf, Bobby	550 East 15th Street	Plano	TX	75074	214-423-5480	214-422-2736
GUARD BUREAU	Castello, CPT Greg		Chantilly	VA		703-607-7982	703-607-7993
Hamilton Army Airfield	Nichols, Ron			GA		404-669-7688	404-669-7827
Hawthorne Army Ammunition Plant	Sergeant, Chester	DZB Incorporated	Hawthorne	NV	89416-5000	702-945-7322	702-945-7014
Holston Defense Corp.	Marsh, Kent	4509 West Stone Drive	Kingsport	TN	37660	615-247-9111	615-247-3329
HQ: ARCCOM	Richert, Debbie	3800 n Camp Creek Pkwy, SW	Atlanta	GA	30331-5099	404-629-5256	404-629-8229
HQ:AMC	Allen, Thomas, LTC	ATTN: AMCCEN; 5001 Eisenhower Ave	Alexandria	VA	22333-0001	703-274-8910	703-274-3409
Hunter Army Airfield	Harris, George	HQ 24th Inf. Div. (M) & Ft. Stewart; ATTN: AFZP-DEV Bldg 739	Ft. Stewart	GA	31314-5000	912-767-2010	912-767-7876
JAY	O'Moore, Allen	1608 Spring Hill Road	Vienna	VA	22182	703-847-4000	703-847-4129

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
Kelly AFB	Pehl, Stanley, Maj.	SA-SLC/EMC, 307 Tinker Drive	Kelly AFB	TX	78241-5917	210-925-3100	210-925-9972
Kelly Support Facility	Lenny, Steve		Oakdale	PA		412-777-1356	412-693-8883
Kuhlmann Design Group	Aronsberg, Gary	66 Progress Parkway	St. Louis	MO	63043	314-434-8898	314-434-8280
Lake City Army Ammunition Plant	Abbott, George	Olin Corporation	Independence	MO	64051-0330	816-796-7101	816-796-7302
Langley AFB; HQ-ACC-CEVCM	Dandeneau, Michelle	129 Andrews Street, Suite 102	Langley AFB	OH	23665-2769	804-764-4430	804-764-5339
Letterkenny Army Depot	Sheffer, Rod	AMSDS-IN-S	Chambersburg	PA	17201	717-267-8926	717-267-8264
Letterkenny Army Depot	Villenger, Dave	AMSDS-IN-S	Chambersburg	PA	17201	717-267-8926	717-267-8264
Lima Army Tank Plant	Wildermuth, Ron	1155 Buckeye Road	Lima	OH	45804	419-221-9537	419-221-9600
Logistics Management Institute	Baxter, Bob	2000 Corporate Ridge	McLean	VA	22102-7805	703-917-7406	703-917-7511
Logistics Management Institute	Brown, Doug	2000 Corporate Ridge	McLean	VA	22102-7805	703-917-7408	703-917-7511
Logistics Management Institute	Tang, Lorna	2000 Corporate Ridge	McLean	VA	22102-7805	703-917-7463	703-917-7511
Lone Star Army Ammunition Plant	Jones, Raymond	D&E Inc.; Hwy 82 W.	Texarkana	TX	75505-7101	214-334-1114	903-334-1120
Malcolm Pirne	Dudek, Ed	2 Corporate Park Drive, Box 751	White Plains	NY	10602-0751	914-641-2677	914-694-9286
Mathews Engineering & Architecture	Mathews, Bill	4045 McDowell Road	Phoenix	AZ	85008	602-244-2664	602-275-3220
McAlester Army Ammunition Plant	Lovitt, Anthony	ATTN: SMC/MC-EM	McAlester	OK	74501-5000	918-421-3346	918-421-2467
National Guard Bureau	Harlow, Peggy	Haverhilo Street	Reading	MA	01867-1999	617-944-0500	617-944-2514
Navy Southern Division, Code 1818	Works, Brandon	SOUTHNAVSACENGCOM, PO Box 190010	North Charleston	SC	29419-9010	803-743-0390	803-743-0465
New York Area Com & Ft Hamilton	Ruppert, Andrew	Dir. of Public Works; ATTN: AFZT-FHE-ENV; Bldg 129	Brooklyn	NY	11252-6800	718-630-4563	718-630-4608
Ofc of Directorate of Env Pgms	Graham, Mark, Maj.	1815 North Fort Myer Drive, Suite 710	Arlington	VA	22209	703-696-1230	703-696-8088
Ofc of Directorate of Env Pgms	Hearne, Steve	1815 North Fort Myer Drive, Suite 710	Arlington	VA	22209	703-696-1230	703-696-8088
Presidio of Monterey	Stein-Freen, Daniel D.	CDR, 7th Inf Div & Ft Ord; ATTN: AFZQ-DE-ENRD; Bldg 4899	Monterey	CA	93941-5777	408-242-2822	408-242-2047
Presidio of San Francisco	Ebert, Bob		San Francisco	CA		415-561-3556	415-561-3844
Pueblo Army Depot	Brown, Nicholas	Safety Office	Pueblo	CO	81001	719-549-4987	no fax
Radford Army Ammunition Plant	Barker, Shelley	ATTN: SMCRA-EN	Radford	VA	24141-0298	703-639-8482	703-639-7789
Radian	Aiello, Joelle	10395 Old Placerville Road	Sacramento	CA	95827	916-362-5332	916-362-2318
Ravenna Army Ammunition Plant	Kasper, Robert	SMCRV-CR	Ravenna	OH	44266-9297	216-297-3124	216-297-3216
Rock Island Arsenal	Poppen, Andrew	HQ: AMCCOM	Rock Island	IL	61299-6000	309-782-1374	309-782-1457
Rock Island Arsenal	Small, James	HQ: AMCCOM	Rock Island	IL	61299-6000	309-782-1116	309-782-1457
Rocky Mountain Arsenal	Smith, J.D.	ATTN: AMXRM-RPB, Bldg. 111	Commerce City	CO	80022-1748	303-289-0239	303-289-0485
Rust Environmental & Infrastructure	Ramey, Timothy	11240 Waples Mille Road, Suite 101	Fairfax	VA	22030	703-385-3566	703-385-8319
Sacramento Army Depot	Fields, Sheffy	SDSSA-EL-4	Sacramento	CA	95813-5052	607-869-5450	607-388-2630
Savanna Army Depot	Marming, Neil, Cpt.	SDSLE-VA	Savanna	IL	61074	815-273-8827	815-273-6025
Schofield Barracks	Takenaka, Clifford	Cmdr., 25th Dic (L) & US Army, Hawaii	Schofield Barracks	HI	96857-6000	808-656-2878	808-656-1259
Seneca Army Depot	Paprocki, Mark	Bldg 123	Romulus	NY	14521	607-869-1519	607-869-5241

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
Sunflower Army Ammunition Plant	Bums, Ralph	SMCSU-EV	Desoto	KS	66018-0640	913-791-6884	913-791-6720
Sunflower Army Ammunition Plant	Sangster, Ian M.	Hercules Corp.; PO Box 549	Desoto	KS	66018	913-791-6809	913-791-6720
TechLaw	Mayer, Gary	14500 Avion Parkway	Chantilly	VA	22021	703-818-1000	703-818-8813
Tooele Army Depot	Strong, Mike	SDSTE-IRE	Tooele	UT	94074	801-833-3504	801-833-2973
TRADOC	Potter, Debbie	HQ: TRADOC Directorate of the Environment; (ATBO-L)	Ft. Monroe	VA	23651-6700	804-727-2299	804-727-2362
URS Consultants	Farrington, Kevin	Mack Centre II; Mack Centre Drive	Paramus	NJ	07652	201-262-7000	201-262-9199
URS Consultants	Haggerty, Bill	Mack Centre II; Mack Centre Drive	Paramus	NJ	07652	201-262-7000	201-262-9199
US AEC (Army Environmental Center)	Josephson, Paul	ATTN:CETHA-EC-A, Bldg E-4435	APG	MD	21010-5401	410-671-1209	410-671-1675
US AEC (Army Environmental Center)	Mays, David	ATTN:CETHA-EC-A, Bldg E-4435	APG	MD	21010-5401	410-671-1209	410-671-1675
US Army TACOM	Parker, Printes	6501 Eleven Mile Road; AMSTA XEM	Warren	MI	48397-5000	313-574-6615	313-574-6374
US Geological Survey	Aycock, Robert	801 Broadway, Suite 500	Nashville	TN	37203	615-736-5424	615-736-2066
US Geological Survey	Mercer, Lori	801 Broadway, Suite 500	Nashville	TN	37203	615-736-5424	615-736-2066
US Geological Survey	Quinones, Fred	810 Broadway, Suite 500	Nashville	TN	37203	615-736-5424	615-736-2066
US Military Academy	Verzuhl, Rudy	ATTN: MAEN-A	West Point	NY	10966-1592	914-938-3224	914-938-2529
USA Environmental Hygiene Agency	Robison, Michael	USA Env. Hygiene Agency, ATTN: HSHB-ME-WM	APG	MD	21010-5422	410-671-3919	410-671-3656
USACOE	Eubank, Frederick C.	20 Mass. Ave., NW	Washington	DC	20314-1000	202-272-1128	
USACOE-Baltimore	Contractor	ATTN: CENAB-PL-EP; PO Box 1715	Baltimore	MD	21203-1715	410-962-2899	410-962-4698
USACOE-Baltimore	Personnel	ATTN: CENAB-PL-EP; PO Box 1715	Baltimore	MD	21203-1715	410-962-2899	410-962-4698
USACOE-Fort Worth	Shelton, Bobbie	ATTN: CESQF-PL-RE; PO Box 17300	Fort Worth	TX	76102-0300	817-334-2095	817-885-7539
USACOE-Los Angeles	Chowdhari, Tru	ATTN: CESPL-ED-MI; PO Box 2711	Los Angeles	CA	90053-2325	213-894-3760	213-894-5312
USACOE-Louisville	Ringsburg, Mark	ATTN: CER-OLF-ED-G, PO Box 59	Louisville	KY	40201-0059	502-582-5321	502-582-5281
USACOE-Mobile	Gibson, Ronnie	ATTN:CESAM-PM-SP	Mobile	AL	36628-0001		205-690-2327
USACOE-Mobile	Long, Joe	109 St. Joseph Street; PO Box 2288	Mobile	AL	36628-0001	205-694-4454	205-690-2327
USACOE-Mobile	Poiroux, Duane	109 St. Joseph Street; PO Box 2288	Mobile	AL	36628-0001	205-694-4454	205-690-2327
USACOE-Mobile	Simpson, Bobby	P.O. Box 2288; ATTN: CEASM-EN-FE	Mobile	AL	36628-0001	205-690-2708	
USACOE-Mobile	Smith, Charles	ATTN: CESAM-PM-SP	Mobile	AL	36628-0001	205-694-4216	205-690-2327
USACOE-New York	Dihari, Steve	Fed. Bldg.; ATTN: CENAN-EA-IR	New York	NY	10278-0090	212-264-6076	212-264-9145
USACOE-New York	Sang, Claudio	Fed. Bldg.; ATTN: CENAN-EA-IR	New York	NY	10278-0090	212-264-6076	212-264-9145
USACOE-Norfolk	Holdereid, Kristine	803 Front Street; ATTN: CENAO-PL-R	Norfolk	VA	23510-1096	804-441-7767	804-441-7646
USACOE-Omaha	Rowe, Steve	215 N 17th Street; ATTN: CEMRO-ED-EA	Omaha	NE	68102-4978	402-221-7673	402-221-7796
USACOE-Sacramento	Krongard, Gary	ATTN: CESPK-ED-N; 1325 J Street	Sacramento	CA	95814-2922	916-557-7415	916-557-7850
USACOE-Savannah	Clowser, Jim	ATTN: CESAS-PM-MP-9; PO Box 889	Savannah	GA	31402-0889	912-652-5625	912-652-5442
USACOE-Savannah	Dugger, Ken	ATTN: CESAS-PM-MP-9; PO Box 889	Savannah	GA	31402-0889	912-652-5625	912-652-5442
USACOE-Seattle	Meinig, Kelly	ATTN: CENPS-PL-ER; PO Box 885	Seattle	WA	98124-2255	206-764-3521	206-764-6795

STORM WATER CONTACT LIST

(Sorted by Installation)

INSTALLATION	NAME	STREET	CITY	ST	ZIP	PHONE	FAX
USACOE, Baltimore District	Galal, Lynne	CENAB-PLE; PO Box 1715	Baltimore	MD	21203-1715	410-962-2995	410-962-4698
USACOE, Baltimore District	Johnson, Eve	CENAB-PLE; PO Box 1715	Baltimore	MD	21203-1715	410-962-2899	410-962-4698
USACOE, Kansas City District	Miller, Robert	ED-MF; 700 Federal Bldg.	Kansas City	MO	64106	816-426-7348	816-426-3690
USARC, DCSENGR	Allen, Jack	ATTN: AFRC-ENS-E 3800 N. Camp Creek Pkwy S.W.	Atlanta	GA	30331	404-629-8265	404-629-8229
USI	Higgins, Paul J.	14585 Avion Parkway	Chantilly	VA	22021	703-502-1372	703-502-1345
USI	Somerville, Paul	14585 Avion Parkway	Chantilly	VA	22021	703-502-1372	703-502-1345
VERSAR, Inc.	Dorman, Michael	6850 Versar Center	Springfield	VA	22151	703-750-3000	703-642-6809
Walter Reed Army Medical Center	Elijah, Leo	HSHL-E; 6925 16th St, NW	Washington	DC	20307-5001	202-576-5365	202-576-2188
Watervliet Arsenal	Sherman, Jim	ATTN: Environmental Quality Division	Watervliet	NY	12189-4050	518-266-5732	518-266-5046
White Sands Missile Range	Orr, Harrison	ATTN: STEWS-ES	WSMR	NM	88002-5031	505-678-2121	
Woodward Clyde	Milne, Mike	900 4th Avenue, Suite 3440	Seattle	WA	98164	206-343-7933	206-343-0513
Yakima Firing Center	Hamre, Mary	HQ I Corps: Ft. Lewis; ATTN: Roads & Sanitation Branch	Yakima	WA	98433-5000	206-967-5237	206-964-2488

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Abbott, George	Lake City Army Ammunition Plant	Olin Corporation	Independence	MO	64051-0330	816-796-7101	816-796-7102
Adair, Jim	120th ARCOM	Bldg 9810, Lee Road	Ft. Jackson	SC	29207-6070	803-751-7653	803-751-7598
Aiello, Joelle	Radian	10395 Old Placerville Road	Sacramento	CA	95827	916-362-5332	916-362-2318
Allen, Jack	USARC, DCSSENGR	ATTN: AFRC-ENS-E 3800 N. Camp Creek Pkwy S.W.	Atlanta	GA	30331	404-629-8265	404-629-8229
Allen, Thomas, LTC	HQ-AMC	ATTN: AMCEIN; 5001 Eisenhower Ave	Alexandria	VA	22333-0001	703-274-8910	703-274-3409
Aronberg, Gary	Kuhlmann Design Group	66 Progress Parkway	St. Louis	MO	63043	314-434-8898	314-434-8280
Aycock, Robert	US Geological Survey	801 Broadway, Suite 500	Nashville	TN	37203	615-736-5424	615-736-2066
Baker, Stephen	99th ARCOM	AFRC-APP-EN; 5 Lobaugh Street	Oakdale	PA	15071-5001	412-777-1233	412-693-8883
Banks, Ron	Fort Leavenworth	ATZL-GEH	Ft. Leavenworth	KS	66027-5020	913-684-4132	913-432-0154
Barker, Shelley	Radford Army Ammunition Plant	ATTN: SMCRA-EN	Radford	VA	24141-0298	703-639-8482	703-639-7789
Bartholomew, Kathlene	Fort Lee	ATZM-EP	Ft. Lee	VA	23801-5200	804-734-5066	804-734-3474
Barton, Russ	CH2M Hill	2567 Fairlane Drive	Montgomery	AL	36116	205-271-1445	205-277-5763
Baxter, Bob	Logistics Management Institute	2000 Corporate Ridge	McLean	VA	22102-7805	703-917-7406	703-917-7511
Bowman, John R.	Fort Myer	ATTN: ANEN-E	Ft. Myer	VA		703-696-2010	703-696-8518
Brach, Bob	Fort Bliss		Ft. Bliss	TX		915-568-1838	915-568-1333
Bridges, Tony	102nd ARCOM	ATTN: AFRC-AMO-EN-E 4301 Goodfellow Blvd.	St. Louis	MO	63120-1794	314-263-1199	314-263-3372
Brown, Doug	Logistics Management Institute	2000 Corporate Ridge	McLean	VA	22102-7805	703-917-7408	703-917-7511
Brown, Nicholas	Pueblo Army Depot	Safety Office	Pueblo	CO	81001	719-549-4987	no fax
Bums, Ralph	Sunflower Army Ammunition Plant	SMCSU-EV	Desolo	KS	66018-0640	913-791-6884	913-791-6720
Bums, Ruel	Arnold Air Force Base	AEDC CEV; 100 Kindel Dr., St. B-314	Arnold AFB	TN		615-454-3296	615-454-6252
Buske, Todd	Army Installations & Services Activity	ATTN: AMXEN-U	Rock Island	IL	61299-7190	309-782-8255	
Cannon, Bob	Air Station Cape Cod	Bldg. 5215	Otis ANGB	MA	02542	508-968-6487	508-968-6491
Carbonell, Frank	Fort Sam Houston	AFZG-DE-ENRD	Ft. Sam Houston	TX	78213	210-221-4930	210-221-3410
Carter, Ed	122nd ARCOM	AFRC-AAR-CK-EN; 8000 Camp Robinson Road	North Little Rock	AR	72118-2206	501-771-7831	501-771-7919
Carter, Jim	Fort Leonard Wood	ATZTABH-E; HQ-USA Eng. Center	Ft. Leonard Wood	MO	65473-5000	314-596-6108	314-596-6516
Castello, CPT Greg	GUARD BUREAU		Chantilly	VA		703-607-7982	703-607-7993
Chowdiah, Tru	USACOE-Los Angeles	ATTN: CESPL-ED-MI; PO Box 2711	Los Angeles	CA	90053-2325	213-894-3760	213-894-5312
Clowser, Jim	USACOE-Savannah	ATTN: CESAS-PM-MP-9; PO Box 889	Savannah	GA	31402-0889	912-652-5625	912-652-5442
Cochran, Mike	Fort Story		Ft. Story	VA	23604-5332	804-727-4241	804-888-0171
Coleman, Bob	Fort Chaiffee	ATZR-ZF	Ft. Chaiffee	AR	72905-5000	501-484-2516	501-484-2230
Collins, Rod	96th ARCOM	ATTN: AFRC-AUT-EN Douglas Res. Cntr. Bldg 232	Salt Lake City	UT	84113-5067	801-584-4386	801-584-4087
Contractor	USACOE-Baltimore	ATTN: CENAB-PL-EP; PO Box 1715	Baltimore	MD	21203-1715	410-962-2899	410-962-4698
Costello, Stephen	79th ARCOM	AFRC-APA-EN; Bldg 176, Naval Air Station	Willow Grove	PA	19090-5110	215-443-1795	215-443-1666
Covalt, Charles	Carlisle Barracks	ATZE-DIS	Carlisle Barracks	PA	17013-5002	717-245-3893	717-245-3713

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Dandeneau, Michelle	Langley AFB; HQ-ACC-CEVCM	129 Andrews Street, Suite 102	Langley AFB	OH	23665-2769	804-764-4430	804-764-3332
DeMoore, Christopher	Fort Gordon	ATZH-DIE, Bldg 2141, 11th Avenue	Ft. Gordon	GA	30905-5450	404-791-2403	706-791-8245
Desai, Dinker	Fort Monmouth	ATTN:SELFM-EH; Bldg 167	Ft. Monmouth	NJ	07703	908-532-1475	908-532-2367
Dibari, Steve	USACOE-New York	Fed. Bldg.; ATTN: CENAN-EA-IR	New York	NY	10278-0090	212-264-6076	212-264-9145
DiGiovanni, Joe	Fort Meade, 97th ARCOM	ATTN:ANME-PWE	Ft. Meade	MD	20755-5115	301-677-9648	301-677-9001
Dirakashi, Temvar	CERL	P.O. Box 9000	Champaign	IL	61826-7003	217-373-3490	217-373-3488
Dishart, Justine	Fort Irwin	Bldg. 385	Ft. Irwin	CA	92310-5000	619-386-3740	619-386-5293
Divinyi, Carl	81st ARCOM	AFRC-AGA-EN; 1514E Cleveland Avenue	East Point	GA	30344-6904	404-559-5924	404-559-6089
Dorman, Michael	VERSAR, Inc.	6850 Versar Center	Springfield	VA	22151	703-750-3000	703-642-6809
Dudek, Ed	Malcolm Prine	2 Corporate Park Drive, Box 751	White Plains	NY	10602-0751	914-641-2677	914-694-9286
Dugger, Ken	USACOE-Savannah	ATTN: CESAS-PM-MP-9; PO Box 889	Savannah	GA	31402-0889	912-652-5625	912-652-5442
Durham, Clyde	90th ARCOM	AFRC-ATX-EN; 1920 Harry Wurzbach Hwy	San Antonio	TX	78209-6097	210-221-4062	210-841-5950
Ebert, Bob	Presidio of San Francisco		San Francisco	CA		415-561-3556	415-561-3844
Edell, Bob	97th ARCOM	AFRC-AMD-EN; Bldg P-1251, Annapolis Rd (RT 176)	Fort Meade	MD	20755-5310	301-677-1411	301-674-6225
Edell, Bob	Fort Meade	ATTN:ANME-PWE	Ft. Meade	MD	20755-5115	301-677-9648	301-677-9001
Elijah, Leo	Walter Reed Army Medical Center	HSHE-E; 6925 16th St. NW	Washington	DC	20307-5001	202-576-5365	202-576-2188
Erbs, Henry	Fort Detrick	Cmdr. US Army Garrison; ATTN: HSHD-SHE	Fredrick	MD	21701	301-663-2555	301-343-2423
Errett, Sue	Fitzsimmons Army Medical Center	HSGH-EH, Bldg 118, DEH	Aurora	CO	80045-5001	303-361-3526	303-361-3424
Eubank, Frederick C.	USACOE	20 Mass. Ave., NW	Washington	DC	20314-1000	202-272-1128	
Farrington, Kevin	URS Consultants	Mack Centre II, Mack Centre Drive	Poramus	NJ	07652	201-262-7000	201-262-9199
Fenlason, Robert W.	Fort Belvoir	CEHSC-FU-S; Bldg. 358	Ft. Belvoir	VA	22060	703-704-1563	
Fields, Sheffy	Sacramento Army Depot	SDSSA-EL-4	Sacramento	CA	95813-5052	607-869-5450	607-388-2630
Foley, David	Fort Pickett	AFZA-PP-E, Ft. Pickett; Bldg. 234	Blackstone	VA	23824	804-292-2630	804-292-2518
Fox, Jimmy	9th ARCOM	ATTN: APIX-EN, 2058 Maluhia Road	Fort DeRussey	HI	96815-1977	808-438-1504	808-438-1860
Fritz, Stephen E.	79th ARCOM	AFRC-APA-EN; Bldg 176, Naval Air Station	Willow Grove	PA	19090-5110	215-443-1662	215-443-1666
Galaal, Lynne	USACOE, Baltimore District	CENAB-PLE; PO Box 1715	Baltimore	MD	21203-1715	410-962-2995	410-962-4698
Galvez-Ortiz, Jesus M.	65th ARCOM	ATTN: AFRC-APR-OE 1300 Area	Fort Buchanan	PR	00934-5000	809-273-3566	809-273-1836
Ghosh, Sue	Fort Belvoir, Env. & Nat Res Dev	ATTN: ANFB-EN Bldg. 1442	Ft. Belvoir	VA	22060-5114	703-806-4007	703-806-3246
Gibson, Ronnie	USACOE-Mobile	ATTN:CESAM-PM-SP	Mobile	AL	36628-0001		205-690-2327
Goode, Josh	123rd ARCOM	AFRC-AIN-EN; Bldg 126	Fort Benj. Harrison	IN	46216-6400	317-549-5061	317-549-5066
Graham, Mark, Maj.	Ofc of Directorate of Env Pgms	1815 North Fort Myer Drive, Suite 710	Arlington	VA	22209	703-696-1230	703-696-8088
Gremillion, Mark	Fort Polk	USGS; AFZX-DE-E	Ft. Polk	LA	71459	318-531-6038	318-531-2604
Haggerty, Bill	URS Consultants	Mack Centre II, Mack Centre Drive	Poramus	NJ	07652	201-262-7000	201-262-9199
Haggerty, Mary	Fort Lewis	HQ I Corps; Ft. Lewis; ATTN: & Sanitation Branch	Ft. Lewis	WA	98433-5000	206-967-5232	206-964-2488

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Hamre, Mary	Fort Parks	HQ I Corps: Ft. Lewis; ATTN: Roads & Sanitation Branch	Ft. Lewis	WA	98433-5000	206-967-5237	206-964-2488
Hamre, Mary	Yakima Firing Center	HQ I Corps: Ft. Lewis; ATTN: Roads & Sanitation Branch	Yakima	WA	98433-5000	206-967-5237	206-964-2488
Harker, Peggy	125th ARCOM	AFRC-ATN-EN; 443 Donnellson Pike	Nashville	TN	37214-3558	615-885-8700	615-885-8767
Harlow, Peggy	National Guard Bureau	Havehilo Street	Reading	MA	01867-1999	617-944-0500	617-944-2514
Harris, George	Hunter Army Airfield	HQ 24th Inf. Div. (M) & Ft. Stewart; ATTN: AFZP-DEV Bldg 739	Ft. Stewart	GA	31314-5000	912-767-2010	912-767-7876
Harris, George A.	Fort Stewart	HQ 24th Inf. Div. (M) & Ft. Stewart; ATTN: AFZP-DEV Bldg 739	Ft. Stewart	GA	31314-5000	912-767-2010	912-767-5916
Hearne, Steve	Offic of Directorate of Env Pgms	1815 North Fort Myer Drive, Suite 710	Arlington	VA	22209	703-696-1230	703-696-8088
Hidalgo, Carlito	124th ARCOM	AFRC-AWA-EN; 4575 36th Avenue West	Fort Lawton	WA	98199	206-281-3142	206-281-3599
Higgins, Jamie	121st ARCOM	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9217	205-940-2488
Higgins, Paul J.	USI	14585 Avion Parkway	Chantilly	VA	22021	703-502-1372	703-502-1345
Hines, David	Fort Gillem		Forest Park	GA		404-752-3702	404-752-4193
Hines, David	Fort McPherson	FCEN-CEE	Ft. McPherson	GA	30350-5000	404-752-3702	404-752-4193
Hofmann, Bill	Fort Ritchie	Bldg 603, Lakeside Drive	Ft. Ritchie	MD	21719-5010	301-878-4159	717-878-5349
Holderid, Kristine	USACOE-Norfolk	803 Front Street; ATTN: CENAO-PL-R	Norfolk	VA	23510-1096	804-441-7767	804-441-7646
Jandali, Edward	63rd ARCOM	AFRC-ACA-EN; Bldg 7, 11200 Lexington Dr.	Los Alamitos	CA	90720-5001	310-795-2366	310-795-2861
Jennings, David	86th ARCOM	ATTN: AFRC-FM-DEE, 2160 S. J St.	Fort McCoy	WI	54656-5162	608-388-4786	608-388-4704
Johnson, Dale	121st ARCOM	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9300	205-940-9213
Johnson, Eve	USACOE, Baltimore District	CENAB-PLE; PO Box 1715	Baltimore	MD	21203-1715	410-962-2899	410-962-4698
Jones, Raymond	Lone Star Army Ammunition Plant	D&E Inc.; Hwy 82 W.	Texarkana	TX	75505-7101	214-334-1114	903-334-1120
Josephson, Paul	US AEC (Army Environmental Center)	ATTN:CETHA-EC-A, Bldg E-4435	APG	MD	21010-5401	410-671-1209	410-671-1675
Kasper, Robert	Ravenna Army Ammunition Plant	SMCRV-CR	Ravenna	OH	44266-9297	216-297-3124	216-297-3216
Katz, Keith	AFG and Ordnance School			MD		410-278-3654	410-278-9014
Kelly, Craig	94th ARCOM	AFRC-AMA-LG-EN; Bldg 1607, Hanscom Field	Hanscom Field	MA	01731-2128	508-796-6272	508-796-3699
Kelly, Tom	Carlisle Barracks	ATZE-DIS	Carlisle Barracks	PA	17013-5002	717-245-4040	717-245-4396
Kelm, Nelson O.	Fort Carson	AFZC-ECM-EC (Kelm)	Ft. Carson	CO	80913-5000	719-579-2022	719-526-1724
Kosko, Nancy	Cmdr., TECOM	AMSTE-EQ	APG	MD	21005-5055	410-278-1083	
Kriegel, Mike	Fort Hood	AFZF-DE-EPG	Ft. Hood	TX	76544	817-287-1343	817-287-3591
Krongard, Gary	USACOE-Sacramento	ATTN: CESPK-ED-N; 1325 J Street	Sacramento	CA	95814-2922	916-557-7415	916-557-7850
LaFontain, Amy	Aberdeen Proving Grounds	STEAP-SH-E	APG	MD	21005-5001	410-278-4099	410-278-4291
Lajoie, Marleen	Camp Keys	DPE, Bldg 8	Augusta	ME	04333-0033	207-626-4395	207-476-4553
Lane, Donald F.	Fort Myer	ATTN: ANEN-E	Ft. Myer	VA		703-696-2010	
Lapinski, Al	90th ARCOM	AFRC-ATX-EN; 1920 Harry Wurzbach Hwy	San Antonio	TX	78209-6097	210-221-4062	210-841-5950
Lenny, Steve	Kelly Support Facility		Oakdale	PA		412-777-1356	412-693-8883
Long, Joe	USACOE-Mobile	109 St. Joseph Street, PO Box 2288	Mobile	AL	36628-0001	205-694-4454	205-690-2327

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Lossey, CPT John	121st ARCOM	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9300	205-940-9213
Lovitt, Anthony	McAlester Army Ammunition Plant	ATTN: SMCMC-EM	McAlester	OK	74501-5000	918-421-3346	918-421-2467
Malick, Kenneth L.	Fort Indianatowin Gap	Cmdr., ATTN: AFKA-ZQ-DE-E	Annville	PA	17003	717-861-2634	717-861-2663
Marcinak, Dana	120th ARCOM	Bldg 9810, Lee Road	Ft. Jackson	SC	29207-6070	803-751-4025	803-751-7598
Marming, Neil, Cpt.	Savanna Army Depot	SDSLE-VA	Savanna	IL	61074	815-273-8827	815-273-6025
Marquardt, Donald J.	Fort Meade	Environmental Mgmt Office; AFKA-ZI-AH-E	Ft. Meade	MD	20755-5115	301-677-9365	301-677-3129
Marsh, Kent	Holston Defense Corp.	4509 West Stone Drive	Kingsport	TN	37660	615-247-9111	615-247-3329
Martin, John	81st ARCOM	AFRC-AGA-EN; 1514E Cleveland Avenue	East Point	GA	30344-6904	404-559-5921	404-559-6089
Matherly, Joe	CERL	P.O. Box 9000	Champaign	IL	61826-7003	217-373-3490	217-373-3488
Matthews, Bill	Matthews Engineering & Architecture	4045 McDowell Road	Phoenix	AZ	85008	602-244-2664	602-275-3220
Matula, Emil	Fort Leavenworth	ATTN: ATZL-GEH	Ft. Leavenworth	KS	66027-5020	913-684-5661	913-684-5634
Mayer, Gary	TechLaw	14500 Avion Parkway	Chantilly	VA	22021	703-818-1000	703-818-8813
Mays, David	US AEC (Army Environmental Center)	ATTN:CETHA-EC-A, Bldg E-4435	APG	MD	21010-5401	410-671-1209	410-671-1675
McGar, Donnie	Fort Knox	AZTK-EH; 77 Binter Street	Fort Knox	KY	40121-5000	502-624-3629	502-624-2151
McLeod, Mel	Fort Belvoir	CEHSC-FU-S; Bldg 358	Ft. Belvoir	VA	22060	703-704-1548	
Meinig, Kelly	USACOE-Seattle	ATTN: CENPS-PL-ER; PO Box 3755	Seattle	WA	98124-2255	206-764-3521	206-764-6795
Mercer, Lori	US Geological Survey	801 Broadway, Suite 500	Nashville	TN	37203	615-736-5424	615-736-2066
Metz, Joseph	Fort Richardson	6th Inf Div (L) & US Army Garrison, AK; ATTN:L APVR-PW-EV	Ft. Richardson	AK	99505-5500	907-384-3042	
Miller, Robert	USACOE, Kansas City District	ED-MF; 700 Federal Bldg.	Kansas City	MO	64106	816-426-7348	816-426-3690
Milliken, Carol	Dugway Proving Grounds	Cmdr., DPG, ATTN: STEDP-EPO	Dugway	UT	84022-5000	801-831-3417	
Milner, Kevin	Anniston Army Depot	SDSAN-DEL-RMD	Anniston	AL	36201	205-235-7189	205-235-7726
Milne, Mike	Woodward Clyde	900 4th Avenue, Suite 3440	Seattle	WA	98164	206-343-7933	206-343-0513
Mitsko, Wayne	9th ARCOM	ATTN: APIX-EN, 2058 Maluhia Road	Fort DeRussey	HI	96815-1977	808-438-1504	808-438-1860
Moore, Richard	63rd ARCOM	AFRC-ACA-EN; Bldg 7, 11200 Lexington Dr.	Los Alamitos	CA	90720-5001	310-795-2366	310-795-2861
Munson, Mike	121st ARCOM	AFRC-AAL-EN; 255 West Oxmoor Road	Birmingham	AL	35209-6383	205-940-9300	205-940-9213
Newman, Bob	Fort Eustis	ATZF EH	Ft. Eustis	VA	23604-5332	804-878-3592	804-888-0171
Newman, Bob	Fort Story	ATZF EH	Ft. Eustis	VA	23604-5332	804-727-4241	804-888-0171
Nichols, Ron	Fort Sheridan		Ft. Sheridan	IL		404-669-7688	404-669-7827
Nichols, Ron	Hamilton Army Airfield					404-669-7688	404-669-7827
O'Moore, Allen	JAYCOR	1608 Spring Hill Road	Vienna	VA	22182	703-847-4000	703-847-4129
Orders, Louis	86th ARCOM	AFRC-AIL-EN; 7402 Roosevelt Road	Forest Park	IL	60130-2587	708-209-2597	708-209-1430
Orr, Harrison	White Sands Missile Range	ATTN: STEWS-ES	WSMR	NM	88002-5031	505-678-2121	
Paprocki, Mark	Senca Army Depot	Bldg 123	Romulus	NY	14521	607-869-1519	607-869-5241
Page, James	US Army TACOM	6501 Eleven Mile Road; AMST-11	Warren	MI	48397-5000	313-574-6619	313-574-6374

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Pehl, Stanley, Maj	Kelly AFB	SA-SLC/EMC, 307 Tinker Drive	Kelly AFB	TX	78241-5917	210-925-3100	210-925-9972
Penta, Greg	Fort Devens	29 Winfield Road	Holden	MA	01520	508-796-3779	508-796-3659
Perez, Tony	Fort Buchanan		Ft. Buchanan	PR		809-273-3508	809-273-3503
Perrich, Jerry	ESE	521 Byers Road, Suite 101	Miamisburg	OH	45342	513-859-3600	513-859-7951
Personnel	USACOE-Baltimore	ATTN: CENAB-PL-EP; PO Box 1715	Baltimore	MD	21203-1715	410-962-2899	410-962-4698
Phillips, John R.	Fort A.P. Hill	Ft. AP.P. Hill; ATTN: AFKA-FHE-E (Phillips)	Bowling Green	VA	22427	804-633-8255	804-633-8443
Phillips, Ron	Fort Riley	Directorate of Engr. & Housing; ATTN: AFZN-DE-VE; Bldg 1970	Ft. Riley	KS	66442-6016	913-239-8499	913-239-8535
Pilatzi, Richard	Fort Carson	AFZC-ECM-EC	Ft. Carson	CO	80913-5000	719-526-2022	719-526-1724
Pinson, Karen	Fort McClellan	AZTN-E	Ft. McClellan	AL	36205-5000	205-848-3125	205-848-3517
Poiroux, Duane	USACOE-Mobile	109 St. Joseph Street; PO Box 2288	Mobile	AL	36628-0001	205-694-4454	205-690-2327
Poppen, Andrew	Rock Island Arsenal	HQ: AMCCOM	Rock Island	IL	61299-6000	309-782-1374	309-782-1457
Potter, Debbie	TRADOC	HQ: TRADOC Directorate of the Environment (ATBO-L)	Ft. Monroe	VA	23651-6700	804-727-2299	804-727-2362
Purvey, Gary, L.TC	94th ARCOM	AFRC-AMA-LG-EN; Bldg 1607, Hanscom Field	Hanscom Field	MA	01731-5290	617-377-4601	617-377-9961
Quinones, Fred	US Geological Survey	810 Broadway, Suite 500	Nashville	TN	37203	615-736-5424	615-736-2066
Ramey, Timothy	Rust Environmental & Infrastructure	11240 Waples Mille Road, Suite 101	Fairfax	VA	22030	703-385-3566	703-385-8319
Reilly, Colleen	86th ARCOM	AFRC-AIL-EN; 7402 Roosevelt Road	Forest Park	IL	60130-2587	708-209-2597	708-209-1430
Richardson, Tim	Fort Lee	ATZM-EP	Ft. Lee	VA	23801-5200	804-734-1420	804-796-6511
Richert, Debbie	HQ: ARCCOM	3800 n Camp Creek Pkwy, SW	Atlanta	GA	30331-5099	404-629-5256	404-629-8229
Ringsburg, Mark	USACOE-Louisville	ATTN: CER-OLF-ED-G, PO Box 59	Louisville	KY	40201-0059	502-582-5321	502-582-5281
Robison, Michael	USA Environmental Hygiene Agency	USA Env. Hygiene Agency; ATTN: HSHB-ME-WM	APG	MD	21010-5422	410-671-3919	410-671-3656
Rockhill, Luman	77th ARCOM	ATTN: AFZE-EH-E CO 10th Min. Div. LI	Fort Drum	NY	13602-5097	315-772-6544	315-772-9154
Rockhill, Luman H.	Fort Drum	Cmdr., HQ 10th Min. Div. (LI) & Ft. Drum; AE2S-EM-E	Ft. Drum	NY	13602-5097	315-772-4156	315-772-8050
Rowell, Rhonda	122nd ARCOM	AFRC-AAR-CK-EN; 8000 Camp Robinson Road	North Little Rock	AR	72118-2205	501-771-7831	501-771-7818
Rowe, Steve	USACOE-Omaha	215 N 17th Street; ATTN: CEMRO-ED-EA	Omaha	NE	68102-4978	402-221-7673	402-221-7796
Ruppert, Andrew	Fort Hamilton	Dir. of Public Works; ATTN: AFZT-FHE-ENV; Bldg 129	Brooklyn	NY	11252-6800	718-630-4563	718-630-4608
Ruppert, Andrew	New York Area Com & Ft Hamilton	Dir. of Public Works; ATTN: AFZT-FHE-ENV; Bldg 129	Brooklyn	NY	11252-6800	718-630-4563	718-630-4608
Sammons, Carol	Fort Jackson	ATZL-EH, Bldg. 2562	Ft. Jackson	SC	29207-5670	803-751-6845	803-751-6821
Sangster, Jan M.	Sunflower Army Ammunition Plant	Hercules Corp.; PO Box 549	Desoto	KS	66018	913-791-6809	913-791-6720
Sang, Claudio	USACOE-New York	Fed. Bldg.; ATTN: CENAN-EA-IR	New York	NY	10278-0090	212-264-6076	212-264-9145
Sasser, Will	Fort Sill	ATZK-E	Ft. Sill	OK	73503-5100	405-442-3409	405-442-5722
Satafrio, Carl	ESE	521 Byers Road, Suite 101	Miamisburg	OH	45342	513-859-3600	513-859-7951
Schaefer, Tom	Fort Benjamin Harrison	ATZL-IS	Ft. Benj. Harrison	IN	26216-5000	317-549-5386	317-549-5384
Scholze, Rick	CERL	P.O. Box 9000	Champaign	IL	61826-9000	217-373-3490	217-373-3488
Schuller, Steve	124th ARCOM	AFRC-AWA-EN; 4575 36th Avenue West	Fort Lawton	WA	98199	206-281-3142	206-281-3599

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Schwartz, Joseph J.	Fort Dix	Directorate of Public Works, ATTN: AFZT-EHN; Bldg 5317	Ft. Dix	NJ	08840-5501	609-562-3050	609-562-5345
Sealf, Bobby	Geo-Marine, Inc.	550 East 15th Street	Plano	TX	75074	214-423-5480	214-422-2736
Sergeant, Chester	Hawthorne Army Ammunition Plant	DZB Incorporated	Hawthorne	NV	89416-5000	702-945-7322	702-945-7014
Sewell, Gary J.	Fort Campbell	HQ 101st Abn Div (AASLT) & Ft. Campbell; DEH Env. Div.	Ft. Campbell	KY	42223-1291	502-798-3487	502-798-3561
Sharma, Balwant	Fort Meade	ATTN: ANME-PWE	Ft. Meade	MD	20755-5115	301-677-3549	301-677-3129
Sheffer, Rod	Letterkenny Army Depot	AMSDS-IN-S	Chambersburg	PA	17201	717-267-8926	717-267-8264
Shelton, Bobbie	USACOE-Fort Worth	ATTN: CESQF-PL-RE; PO Box 17300	Fort Worth	TX	76102-0300	817-334-2095	817-885-7539
Sherman, Jim	Watervliet Arsenal	ATTN: Environmental Quality Division	Watervliet	NY	12189-4050	518-266-5732	518-266-5046
Shivley, Mary	Fort Monroe	AZTC-EH	Ft. Monroe	VA	23651-6700	804-727-3269	804-727-3011
Sieracki, Randy	Fort Huachuca		Ft. Huachuca	AZ		602-533-3120	602-533-3043
Simpson, Bobby	USACOE-Mobile	P.O. Box 2288; ATTN: CEASM-EN-FE	Mobile	AL	36628-0001	205-690-2708	
Skaggs, Jerry	99th ARCOM	AFRC-APP-EN; 5 Lobaugh Street	Oakdale	PA	15071-5001	412-777-1232	412-693-8883
Small, James	Rock Island Arsenal	HQ. AMCCOM	Rock Island	IL	61299-6000	309-782-1116	309-782-1457
Smith, Charles	USACOE-Mobile	ATTN: CESAM-PM-SP	Mobile	AL	36628-0001	205-694-4216	205-690-2327
Smith, J.D.	Rocky Mountain Arsenal	ATTN: AMXRM-RPB, Bldg. 111	Commerce City	CO	80022-1748	303-289-0239	303-289-0485
Somerville, Paul	USI	14585 Avion Parkway	Chantilly	VA	22021	703-502-1372	703-502-1345
Sprock, Phyllis	Fort Monroe	AZTC-EH	Ft. Monroe	VA	23651-6700	804-727-5363	804-727-3011
Staggs, David	83rd ARCOM	AFRC-AOH-BO; Bldg 306, P.O. Box 16515	Columbus	OH	43216-5004	614-692-1936	614-692-1575
Staggs, Rick	83rd ARCOM	AFRC-AOH-BO; Bldg 306, P.O. Box 16515	Columbus	OH	43216-5004	614-692-1938	614-692-1575
Stancar, Joe	Fort Bragg	AFZA-PW-DV; Bldg 3-1933	Ft. Bragg	NC	28302	919-396-3341	919-396-5830
Stanuszek, Joseph	Army USAMC Installins & Svc Activity	ATTN: AMZEN-U	Rock Island	IL	61299-7190	309-782-4732	
Stein-Freen, Daniel	Fort Hunter-Liggett	CDR, 7th Inf Div & Ft Ord; ATTN: AFZQ-DE-ENRD; Bldg 4899	Ft. Ord	CA	93941-5777	408-242-2822	404-242-2047
Stein-Freen, Daniel D.	Fort Ord	CDR, 7th Inf Div & Ft Ord; ATTN: AFZQ-DE-ENRD; Bldg 4899	Ft. Ord	CA	93941-5777	408-242-2822	408-242-2047
Stein-Freen, Daniel D.	Presidio of Monterey	CDR, 7th Inf Div & Ft Ord; ATTN: AFZQ-DE-ENRD; Bldg 4899	Monterey	CA	93941-5777	408-242-2822	408-242-2047
Stenger, Carl	Fort Leonard Wood	ATZTAEH-E; HQ USA Eng. Center	Ft. Leonard Wood	MO	65473-5000	314-596-0869	314-596-0868
Stone, Dennis	86th ARCOM	ATTN: AFRC-FM-DEE, 2160 S. J St.	Fort McCoy	WI	54656-5162	608-388-4794	608-388-4704
Stone, Dennis A.	Fort McCoy	Cmdr., HQ Ft. McCoy; ATTN: AFZR-DE-E, Bldg 2170	Sparta	WI	54656-5000	608-388-2160	608-388-4704
Strong, Mike	Tooele Army Depot	SDSTE-IRE	Tooele	UT	94074	801-833-3504	801-833-2973
Takamiya, George	Fort Shafter	Cmdr., USARPAC; ATTN: APEN-EV	Ft. Shafter	HI	96858-5100	808-438-0780	808-438-8688
Takenaka, Clifford	Schofield Barracks	Cmdr., 25th Dic (L) & US Army, Hawaii	Schofield Barracks	HI	96857-6000	808-656-2878	808-656-1259
Tang, Lorna	Logistics Management Institute	2000 Corporate Ridge	McLean	VA	22102-7805	703-917-7463	703-917-7511
Undrakonda, Apama	DYNAMAC	Maritime Center 1; Suite 260	Baltimore	MD	21224	410-633-0980	410-633-0985
Van Laanen, Mike	88th ARCOM	AFRC-AMIN-EN; 506 Roeer Circle	Fort Snelling	MN	55111-4066	612-725-5271	612-725-8040
Verz, Rudy	US Military Academy	ATTN: MAEN-A	West Point	NY	10966-1592	914-938-3224	914-938-2529

STORM WATER CONTACT LIST

(Sorted by Name)

NAME	INSTALLATION	STREET	CITY	ST	ZIP	PHONE	FAX
Villenger, Dave	Letterkenny Army Depot	AMSDS-IN-S	Chambersburg	PA	17201	717-267-8926	717-267-8264
Walker, Tom	Fort Rucker	ATZQ-DEH	Ft. Rucker	AL	3632-5000	205-255-5926	205-255-2058
Wang, Shih-Chi	Fort McClellan	AZTN-E	Ft. McLellan	AL	36205-5000	205-848-3758	205-848-5517
Warren, Howard	89th ARCOM	AFRC-AKS-LG-E; 3130 George Washington Blvd	Wichita	KS	67210-1598	316-681-1759	316-652-2392
Wells, Frederick P.	77th ARCOM	AFRC-ANY-SE; Bldg 200, Fort Totten	Fort Totten	NY	11359-1016	718-352-5766	718-352-5679
White, Brad	ESE	521 Byers Road, Suite 101	Miamisburg	OH	45342	513-859-3600	513-859-7951
Wildermuth, Ron	Lima Army Tank Plant	1155 Buckeye Road	Lima	OH	45804	419-221-9537	419-221-9600
Wilkins, Joe	Fort Benning, USA Drb. Center	Env. Mgmt. Div.; ATTN: ATZB-PWN-P	Ft. Benning	GA	31905	706-545-2400	706-545-7814
Wilnot, Harry	94th ARCOM	AFRC-AMA-LG-EN; Bldg 1607, Hanscom Field	Hanscom Field	MA	01731-2128	508-796-6273	617-377-9961
Witte, Ted	96th ARCOM	ATTN: AFRC-APA-EN, Bldg 176, Naval Air Station	Willow Grove	PA	19090-5110	801-584-4386	801-584-4087
Works, Brandon	Navy Southern Division, Code 1818	SOUTHNAVSACENGCOM, PO Box 190010	North Charleston	SC	29419-9010	803-743-0390	803-743-0465
Zeinhofner, Loren	Fort Drum	Cmdr., HQ 10th Min. Div. (LI) & Ft. Drum; AE2S-EM-E	Ft. Drum	NY	13602-5097	315-772-7178	315-772-8050



APPENDIX R

Relevant Elements of Other Facility
Environmental Plans

POTENTIALLY RELEVANT ELEMENTS OF OTHER FACILITY ENVIRONMENTAL PLANS

Required Elements of Each Plan	Storm Water Pollution Prevention Plan	Preparedness Prevention and Contingency Plan (40 CFR 264 and 265)	Spill Control and Countermeasures (40 CFR 112)	NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469)	OSHA Emergency Action Plan (29 CFR 1910)
Identification of Pollutants of Concern	<ul style="list-style-type: none"> Description of potential pollutant sources Risk identification Material inventory Test for illicit connections 	<ul style="list-style-type: none"> Requires identification of hazardous wastes handled at the facility and associated hazards 	<ul style="list-style-type: none"> Requires prediction of direction, rate of flow and total quantity of oil that could be discharged 	<ul style="list-style-type: none"> Requires identification of toxic organic compounds used 	<ul style="list-style-type: none"> Requires list of major workplace fire and emergency hazards
Coordinator	<ul style="list-style-type: none"> Pollution prevention planner or team under supervision of plant manager 	<ul style="list-style-type: none"> Emergency coordinator at facility or on call at all times to coordinate emergency response. 	<ul style="list-style-type: none"> Designated person who is accountable for oil spill prevention and who reports to line management 	Not specifically addressed	Not specifically addressed
Operational Controls	<ul style="list-style-type: none"> Preventive maintenance program Good housekeeping Spill prevention and response procedures Site-specific storm water BMPs Activity-specific BMPs 	<ul style="list-style-type: none"> Requires that personnel involved in hazardous waste activities have access to emergency communication device 	<ul style="list-style-type: none"> Requires appropriate spill prevention and containment procedures 	<ul style="list-style-type: none"> Requires method of disposal used instead of dumping into drain be specified Procedures for assuring that toxic organics do not routinely spill or leak into wastewater 	<ul style="list-style-type: none"> Requires employer to control accumulations of flammable and combustible waste Maintain equipment and systems to prevent accidental ignition of combustible materials
Structural Controls	<ul style="list-style-type: none"> Sediment and erosion control Site-specific storm water BMPs Activity-specific BMPs BMPs for non-storm water discharges Enclosure of salt storage piles Provide containment, drainage control, and/or diversionary structures to prevent contamination of storm water discharges associated with industrial activity from facilities subject to EPCRA Section 313 Security for EPCRA Section 313 facilities 	<ul style="list-style-type: none"> Maintain aisle space for movement of emergency equipment and personnel Specific requirements for storage tanks 	<ul style="list-style-type: none"> Appropriate containment and/or diversionary structures or equipment (detailed suggestions provided in reg.) Security - including fences and gates, locks for flow and drain valves and pumps, and lighting 	<ul style="list-style-type: none"> Specify method of disposal used instead of dumping into drain Procedures for assuring that toxic organics do not routinely spill or leak into wastewater 	Not specifically addressed

Source: Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

POTENTIALLY RELEVANT ELEMENTS OF OTHER FACILITY ENVIRONMENTAL PLANS (Continued)

Required Elements of Each Plan	Storm Water Pollution Prevention Plan	Preparedness Prevention and Contingency Plan (40 CFR 264 and 265)	Spill Control and Countermeasures (40 CFR 112)	NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469)	OSHA Emergency Action Plan (29 CFR 1910)
Inspections	<ul style="list-style-type: none"> Routine visual inspection of designated equipment and plant areas, including materials handling, by qualified plant personnel who will also develop procedures to ensure follow up Annual site inspection to verify the accuracy of pollutant source description, drainage map and controls 	Not specifically addressed	<ul style="list-style-type: none"> Testing and inspection of pollution prevention/control equipment by owner/operator on a scheduled, periodic basis Inspections should be in accordance with written procedures developed for the facility by the owner/operator 	Not specifically addressed	Not specifically addressed
Employee Training	<ul style="list-style-type: none"> Training for employee at all levels in: <ul style="list-style-type: none"> spill response good housekeeping materials management Specify periodic training dates in plan 	Not specifically addressed	<ul style="list-style-type: none"> Owners/operators are responsible for properly training personnel on applicable regulations and in the operation and maintenance of equipment to prevent discharges Owners/operators should schedule and conduct spill prevention briefings for operating personnel 	Not specifically addressed	<ul style="list-style-type: none"> Designate and train a sufficient number of persons to assist in safe evacuation
Coordinate with Local Authorities	<ul style="list-style-type: none"> Facilities which discharge storm water to large or medium municipal separate storm sewer systems must comply with applicable conditions in municipal storm water management programs 	<ul style="list-style-type: none"> Familiarize local police and fire departments, hospitals and emergency response teams <ul style="list-style-type: none"> layout of facility properties of hazardous wastes types of injuries Coordinate arrangements for plan implementation authorities 	<ul style="list-style-type: none"> Follow contingency plan provisions of 40 CFR 109 including consultation with State and local governments 	Not specifically addressed	Not specifically addressed

Source: Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

POTENTIALLY RELEVANT ELEMENTS OF OTHER FACILITY ENVIRONMENTAL PLANS (Continued)

Required Elements of Each Plan	Storm Water Pollution Prevention Plan	Preparedness Prevention and Contingency Plan (40 CFR 264 and 265)	Spill Control and Countermeasures (40 CFR 112)	NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469)	OSHA Emergency Action Plan (29 CFR 1910)
Emergency/Spill Response Equipment	<ul style="list-style-type: none"> Necessary equipment to implement a spill clean up 	<ul style="list-style-type: none"> List describing emergency equipment and its location: <ul style="list-style-type: none"> Internal communications (intercom or alarm) Immediately accessible line of communication to summon emergency assistance (fire/police) fire extinguishers water supplies decontamination equipment All control equipment must be tested and maintained 	<ul style="list-style-type: none"> Appropriate containment and/or diversionary structures or equipment If impractical, a written commitment of equipment and materials required to expeditiously control and remove any harmful quantities of oil discharged 	Not specifically addressed	<ul style="list-style-type: none"> Alarm system

Source: Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

POTENTIALLY RELEVANT ELEMENTS OF OTHER FACILITY ENVIRONMENTAL PLANS (Continued)

Required Elements of Each Plan	Storm Water Pollution Prevention Plan	Preparedness Prevention and Contingency Plan (40 CFR 264 and 265)	Spill Control and Countermeasures (40 CFR 112)	NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469)	OSHA Emergency Action Plan (29 CFR 1910)
<p>Notification/Record Keeping Procedures</p> <ul style="list-style-type: none"> Record spills and other discharges Record storm water quality/ quantity information Document inspection and maintenance activities Certify that discharge has been tested for the presence of non-storm water discharges or certify where such testing is not feasible 	<ul style="list-style-type: none"> In case of imminent or actual emergency situation: <ul style="list-style-type: none"> activate alarms/ communication systems to notify facility personnel notify State/local agencies identify the character, exact source, amount and areal extent of release assess hazards to human health and the environment and respond facilitate containment coordinate clean up submit incident report 	<ul style="list-style-type: none"> Written procedures for and records of inspections should be made part of the SPCC and maintained for 3 years Detailed notification requirements apply if a facility has a single spill event of more than 1000 gallons of oil or has discharged oil in harmful quantities in two spill events within the last 12 months 	<p>Not specifically addressed</p>	<p>Not specifically addressed</p>	<ul style="list-style-type: none"> Means of reporting fires and other emergencies
<p>Evacuation Procedures</p>	<p>Not specifically addressed</p>	<ul style="list-style-type: none"> Evacuation plan describing: <ul style="list-style-type: none"> signals to begin evacuation primary and alternate routes 	<p>Not specifically addressed</p>	<p>Not specifically addressed</p>	<ul style="list-style-type: none"> Emergency escape routes Procedures to account for all employees Procedures for employees who remain behind to perform critical functions

Source: Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

POTENTIALLY RELEVANT ELEMENTS OF OTHER FACILITY ENVIRONMENTAL PLANS (Continued)

Required Elements of Each Plan	Storm Water Pollution Prevention Plan	Preparedness Prevention and Contingency Plan (40 CFR 264 and 265)	Spill Control and Countermeasures (40 CFR 112)	NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469)	OSHA Emergency Action Plan (29 CFR 1910)
Plan Location/ Distribution	<ul style="list-style-type: none"> Maintained at facility unless requested by the director or the municipal operator 	<ul style="list-style-type: none"> Maintained at facility Submitted to local police, fire, hospital, and State and local emergency response teams 	<ul style="list-style-type: none"> Maintain at facility if facility is normally attended at least 8 hours per day or at nearest field office if not so attended 	<ul style="list-style-type: none"> Submitted to permitting authority for approval 	<ul style="list-style-type: none"> Plan shall be written and kept at the workplace unless there are fewer than 10 employees, then oral communication is sufficient Employer shall review the plan with each employee covered by the plan when: <ul style="list-style-type: none"> Plan is initially developed Plan changes Employee's responsibility changes
Modification of Plan	<ul style="list-style-type: none"> Plan fails to control pollutants in storm water Change in design, construction, operation or maintenance Requested by the director 	<ul style="list-style-type: none"> Facility permit revised Plan fails during emergency Facility changes Emergency coordinator(s) change Emergency equipment changes 	<ul style="list-style-type: none"> By the Regional Administrator where the plan does not meet requirements or is necessary to prevent and contain discharges of oil By the owner/operator: <ul style="list-style-type: none"> change in facility if warranted by findings of 3 years evaluation 	Not specifically addressed	Not specifically addressed

Source: Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

POTENTIALLY RELEVANT ELEMENTS OF OTHER FACILITY ENVIRONMENTAL PLANS (Continued)

Required Elements of Each Plan	Storm Water Pollution Prevention Plan	Preparedness Prevention and Contingency Plan (40 CFR 264 and 265)	Spill Control and Countermeasures (40 CFR 112)	NPDES Toxic Organic Management Plan (40 CFR 413, 433, 469)	OSHA Emergency Action Plan (29 CFR 1910)
Certification	<ul style="list-style-type: none"> • Certify that discharges have been tested for the presence of non-storm water discharges • Plans must be signed and certified in accordance with 40 CFR 122.22 • <i>Spill prevention and response plan for facilities subject to EPCRA Section 313 must be reviewed and certified every three years by a registered professional engineer.</i> 	Not specifically addressed	<ul style="list-style-type: none"> • Plan must be reviewed and certified by a registered professional engineer 	No dumping of toxic organic compounds into the wastewater has occurred and the approved TOMP is being implemented	Not specifically addressed

Source: Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

APPENDIX S

Phase II Draft Report to Congress
Executive Summary

Water



Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System Storm Water Program

DRAFT

Report to Congress

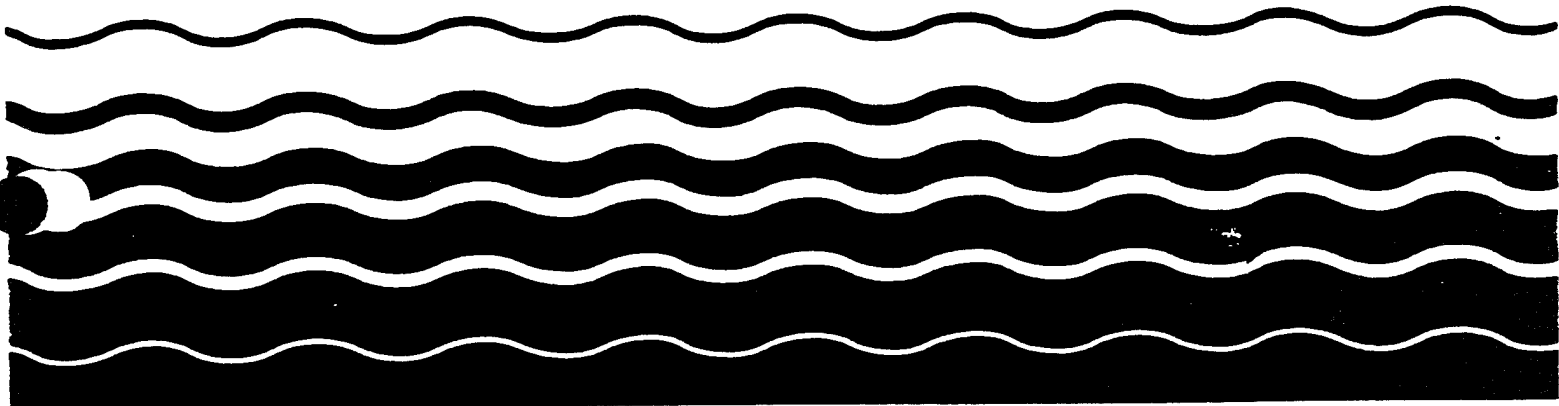


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EXECUTIVE SUMMARY

Section 402(p)(5) of the Clean Water Act (CWA) requires the U.S. Environmental Protection Agency (EPA), in consultation with the States, to conduct a study to:

- (A) identify those storm water discharges or classes of storm water discharges for which National Pollutant Discharge Elimination System (NPDES) permits are not required under Phase I of the NPDES storm water program;
- (B) determine, to the maximum extent practicable, the nature and extent of pollutants in such discharges; and
- (C) establish procedures and methods to control storm water discharges to the extent necessary to mitigate impacts on water quality.

This report presents the results of the study conducted in response to Section 402(p)(5)(A) and (B) of the CWA. EPA will be making recommendations to Congress on procedures and methods to control Phase II storm water discharges in the context of CWA reauthorization.

BACKGROUND

Section 402(p) was added to the CWA in 1987 to establish a framework for addressing storm water discharges under the NPDES program. This provision established a phased approach for controlling storm water discharges. Phase I of the program provides for the regulation of storm water from industrial facilities and discharges from municipal separate storm sewer systems serving a population of 100,000 or more through the issuance of NPDES permits.

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The scope of Phase II of the NPDES program for storm water discharges is not defined in the CWA. Rather, the Act establishes a process through which EPA will define a Phase II regulatory program. Section 402(p)(5) of the CWA requires EPA, in consultation with the States, to conduct two studies of Phase II storm water discharges. The first study, represented by this draft, is to identify storm water discharges not covered under Phase I and determine, to the maximum extent practicable, the nature and extent of pollutants in such discharges. The second study is to establish procedures and methods to control storm water discharges to the extent necessary to mitigate impacts on water quality.

Section 402(p)(6) of the CWA requires EPA, in consultation with State and local officials and based on the findings of this report, to issue regulations designating Phase II storm water discharges to be regulated to protect water quality and to establish a comprehensive program to regulate such designated sources. The regulations must, at a minimum, establish priorities, requirements for State storm water management programs, and expeditious deadlines. The program may include performance standards, guidelines, guidance, and management practices and treatment requirements, as appropriate.

STUDY APPROACH

EPA has identified two major classes of potential Phase II storm water discharges that are described in this report -- 1) discharges from municipal separate storm sewer systems not subject to Phase I; and 2) discharges from industrial and commercial facilities not subject to Phase I.

Municipal Separate Storm Sewer Systems

EPA identified municipalities with urban populations that were not addressed by Phase I of the NPDES program as potentially having Phase II municipal separate storm sewer systems. The population and type of municipality (e.g. incorporated place, minor civil division, county) was identified from 1990 Census data reported by the Bureau of Census. In addition, urban populations in municipalities were characterized by whether the

population was located in one of the 396 urbanized areas designated by the Bureau of Census¹.

A literature review of urban runoff was conducted and used to develop a summary of the nature and extent of discharges from municipal separate storm sewer systems. This included a summary of pollutant concentration data for runoff from residential and commercial areas from the Nationwide Urban Runoff Program (NURP). The NURP data was used to develop annual load estimates for 10 conventional pollutants in discharges from municipal separate storm sewer systems in Census-designated urbanized areas.

Individual Phase II Facilities

EPA used a screening process to identify facilities currently not covered under Phase I of the NPDES storm water program that may potentially use, process, or store significant materials or engage in activities that could significantly contribute pollutants to storm water. To identify these facilities, the Agency initially considered all of the Standard Industrial Classification (SIC) codes of facilities that are not addressed by Phase I of the storm water program. Two major groups of potential Phase II facilities were identified. The first group (Group A) consists of facilities essentially identical to Phase I industrial activities but that were not regulated due to regulatory or statutory inconsistencies. The second group (Group B) consists of 12 classes of facilities based on either the similarity of their activities to the activities of Phase I facilities or on case studies and expert opinions. These 12 categories correspond to 90 four-digit SIC codes.

The screening process to identify potential Phase II industrial and commercial facilities eliminated from further analysis two major classes of facilities: facilities conducting

¹ The Bureau of Census has defined 396 urbanized areas comprised of a central city (or cities) with a surrounding densely settled area to provide a better separation of urban and rural population and housing in the vicinity of large cities. To meet the Bureau of Census definition, the population of the entire urbanized area must be greater than 50,000 persons, and the closely settled area outside of the city, the urban fringe, must have a population density generally greater than 1,000 persons per square mile (just over 1.5 persons per acre).

Executive Summary

agricultural and most silvicultural activities, and service sectors such as financial services and retail food services. Over 0.3 million agricultural and silvicultural facilities in the FACTS data base were eliminated from the analysis because storm water discharges from these facilities are exempted from NPDES requirements. Over 5.8 million facilities in the banking, finance, insurance, and retail food service categories were eliminated because they appear to be unlikely to conduct activities that contribute pollutants to storm water other than from common activities such as operating parking lots and trash dumpsters. While these activities may present problems, EPA believes they are better addressed through State, municipal, or other local storm water requirements.

Several sources of information were used to provide insight on the types of pollutants that could be expected in industrial and commercial facilities that were potentially subject to Phase II of the NPDES program. Previous studies of industrial and commercial land uses were reviewed. Supplemental information was obtained from a literature review. In addition, representative sampling data from NPDES group applications for storm water from Phase I industrial facilities were summarized. Statistical parameters describing the group application sampling data, including the mean, median, and 95th percentile values, were calculated. Where possible, similarities between activities at Phase I and Phase II facilities were also identified to allow pollutant concentration data from Phase I to be compared to potential Phase II facilities.

The geographic distribution of those Phase II industrial and commercial facilities in the targeted 90 SIC categories was evaluated by analyzing the FACTS data base in conjunction with population data from the Bureau of Census.

Outreach Efforts

EPA has conducted an extensive outreach process to gather input and expert opinion on potential options for a Phase II program. Two major tasks have been undertaken to obtain the views and information of the general public as well as of selected experts in storm water and nonpoint source pollution. These include a Federal Register notice requesting comment on Phase II (Appendix H) and the Rensselaerville project (Appendix I), which involved a series of public and experts meetings to develop and evaluate specific Phase II options.

On September 9, 1992, EPA published a notice in the Federal Register to request information and public comment on all aspects of Phase II. The notice recognized that there are three major sets of procedural issues associated with developing Phase II regulations:

- 1) How should sources that are to be subject to Phase II regulations be identified?
- 2) What types of control strategies should be developed for these sources?
- 3) What are appropriate deadlines for implementing Phase II requirements?

The notice presented a range of alternatives under each issue in an attempt to illustrate, and get input on, the full range of potential approaches for a Phase II strategy.

In December of 1991, EPA initiated a project, in conjunction with the Rensselaerville Institute, to: 1) identify ways to improve and streamline Phase I of the storm water program; and 2) identify options for controlling Phase II storm water discharges. To accomplish the first objective, the Rensselaerville Institute sponsored six focus groups across the country with members representing State and local governments, the regulated community, and environmental interests for full day discussions on ways to improve the storm water program.

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The second part of the Rensselaerville project focussed on Phase II of the storm water program. This effort was begun during the drafting of the Federal Register notice and presented essentially the same information used in the public and experts meetings. The first element of this effort consisted of a survey of a select group of non-point source and point source storm water program experts from across the country. Three public meetings and a strategy design meeting were then held to review the information gathered from these surveys and generate a detailed strategy which could be used to guide EPA in the development and implementation of a Phase II program.

Literature Review

A comprehensive literature review was conducted for this report at several libraries, including the libraries of the University of Maryland and George Washington University, the Library of Congress, the USGS library, and the National Agricultural Library. The On-Line Computer Library Center (OCLC), a national bibliographic data base of 27 million records representing the holdings of more than 15,000 libraries worldwide, was accessed. The OCLC system enables searches of periodicals, books, and other publications to be conducted using author, title, or subject key words. Numerous key words and phrases were searched, including key words associated with the activities of industries selected for the Phase II analysis. General terms such as storm water, industrial pollution, and names of products or contaminants thought to be associated with particular industries were also searched using OCLC.

A data base search was also conducted at the Library of Congress for information in trade association journals and other publications, environmental engineering journals and periodicals, environmental business journals and periodicals, and other publications that potentially had information related to the analysis of Phase II industrial and commercial facilities. Other resources used in the literature search included EPA documents and periodicals in the Pollution Prevention Information Clearinghouse and Toxic Release Information System, documents available through the Storm Water Hotline, storm water

rulemaking dockets, selected development documents for effluent limitations guidelines, and publications from State offices. Additional organizations, including the Department of Defense, Department of Transportation and the Forest Service were contacted to obtain information on pollutant concentrations in storm water discharges from potential Phase II industrial and commercial facilities.

SUMMARY OF FINDINGS

Municipal Separate Storm Sewer Systems

The Bureau of Census estimates that the population of the United States was over 248.7 million in 1990 and that there are 19,289 incorporated places and 17,805 minor civil divisions in the United States. These incorporated places and minor civil divisions are located in 3,141 counties or county equivalents.

The concept of Bureau of Census-designated urbanized areas served as an important tool for analyzing potential approaches for Phase II regulations that addressed municipal separate storm sewer systems. More than 158 million people (63 percent of the total United States population) reside in 396 urbanized areas with a population of 50,000 or more that have been designated by the Bureau of Census. These areas occupy less than 2 percent of the Nation's total land area. These areas represent the largest, most widespread areas of dense urban development in the country. In addition, the majority of new urban development occurs in Census-designated urbanized areas. New development is widely recognized as providing some of the best opportunities for implementing storm water management controls in the most cost effective fashion possible. Between 1980 and 1990, the population of Census designated urbanized areas increased by 19.1 million². During the same time period, the rural population of the United States increased by 2.2 million, and the

² About 7 percent of this increase, (1.5 million people) are associated with the net addition of 30 new urbanized areas between 1980 and 1990.

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urban population that lived outside of urbanized areas increased by 0.9 million. Between 1980 and 1990, the population of urbanized areas with one or more municipal systems addressed by Phase I of the NPDES storm water program increased by 16.4 million (75 percent of the total National growth). The population and number of municipalities in urbanized areas, and estimated percentage of pollutant loads in runoff from urbanized areas are summarized in Table ES-1 and discussed below.

Table ES-1. Estimated Pollutant Loadings in Runoff from Urbanized Areas

Classification	Size of Urbanized Area	Population (millions)	Total Area (sq. mi.)	Number of Urbanized Areas	Number of Incorporated Places	Number of Minor Civil Divisions	Number of Counties	% Loading from UAs
National		248.7	3,536,341	396	19,289	17,796	3,141	NA
Phase I Municipalities Outside Urbanized Areas		8.2	105,157	-	65	0	5	-
Phase I Municipalities within Urbanized Areas								
Phase I 50,000 - 99,999		0.4	202.3	8	8	0	6	0
Municipalities within Urbanized Areas 100,000 - 249,999		6.4	3,138.5	48	54	0	13	5
Over 250,000		75.7	22,008.9	82	323	0	54	36
SUBTOTAL		82.5	25,349.7	138	585	0	73	41
Phase II Portions of Phase I Affiliated Urbanized Areas								
Phase II 50,000 - 99,999		0.2	118.8	8	11	1	4	0
100,000 - 249,999		1.9	1,154.1	48	72	53	62	2
Over 250,000		33.2	14,792.7	82	1,498	544	240	24
SUBTOTAL		35.3	16,065.6	138	1,573	598	306	26
Urbanized Areas Not Affiliated With Phase I Municipality								
50,000 - 99,999		11.3	7,232.7	164	443	265	242	12
100,000 - 249,999		10.6	5,770.6	73	364	263	90	10
Over 250,000		18.5	6,602.7	21	654	359	46	12
SUBTOTAL		40.4	19,606.0	258	1,461	887	378	33
All Urbanized Areas								
50,000 - 99,999		11.9	7545.8	172	462	266	252	12
100,000 - 249,999		18.9	10,063.2	121	498	316	165	16
Over 250,000		127.4	43,004.3	108	2,667	983	340	72
TOTAL		158.2	61,013.3	396	3,619	1,485	757	100

Phase I of the NPDES program for storm water discharges addresses 650 incorporated places (cities) and portions of 78 counties³. These municipalities had a combined population of 87 million people in 1990. Cities with a population of 100,000 or more

³ Of these municipalities, 135 cities and 47 counties are specifically identified in the NPDES regulations that were published in November of 1990. EPA and authorized NPDES States have designated an additional 482 cities and 21 counties as Phase I municipalities. The analysis also assumes that an additional 35 cities and 10 counties will be added to Phase I to account for the 1990 Census.

whose municipal systems are already addressed by Phase I of the NPDES storm water program increased in population by about 4.9 million between 1980 and 1990⁴. The majority of the population of Phase I municipalities, 83.2 million people, live in 138 of the 396 Census-designated urbanized areas. EPA estimates that about 40 percent of the pollutant loads in storm water discharged from urbanized areas comes from Phase I municipalities.

The Phase II portions of the 138 urbanized areas with one or more Phase I municipal separate storm sewer system have a combined population of 35.3 million people. The population of urbanized areas that did not have a phase I municipal system increased by 2.6 million between 1980 and 1990. EPA estimates that 1,573 incorporated places, 598 minor civil divisions, and parts of 306 counties are located in the Phase II portions of these urbanized areas. EPA estimates that about one-quarter of the pollutant loads in storm water discharged from urbanized areas come from Phase II portions of the 138 urbanized areas with a Phase I municipality.

A total of 258 of the Census-designated urbanized areas do not have a municipality with separate storm sewers subject to Phase I of the storm water program. The 258 urbanized areas without a Phase I municipal separate storm sewer system have a combined population of 40.4 million people. EPA estimates that 1,461 incorporated places, 887 minor civil divisions, and parts of 378 counties are located in these urbanized areas. EPA estimates that about one-third of the pollutant loads in storm water discharged from urbanized areas come from the 258 urbanized areas without a Phase I municipality. Of the 258 urbanized areas without a Phase I municipal system, 94, or over a third, have a population of more than 100,000, and 21 have a population of more than 250,000.

⁴ The 4.9 million increase does not include increases associated with unincorporated, urbanized portions of phase I counties and designated municipalities.

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The Bureau of Census has identified an additional urban population of 29 million people that live outside of urbanized areas. Of this total, 25.1 million people live in 3,689 incorporated places. The remaining 4 million people live in either minor civil divisions or unincorporated portions of counties.

Individual Phase II Facilities

The primary results of this report are summarized in the three main categories identified by Congress: identification, nature and extent of unregulated discharges. Due to very limited national data on which to base loadings estimates, the discussion of the extent of unregulated storm water discharges is limited to an analysis of the number and geographic distribution of potential Phase II facilities.

Identification of Phase II Sources

EPA's efforts to identify sources and categories of storm water discharges for which permits are not required in Phase I of the program resulted in identification two general classes of facilities. The first group includes sources that are very similar or identical to Phase I activities but that were omitted from Phase I due to statutory or regulatory inconsistencies (Group A). The second general class of facilities were identified on the basis of potential activities and pollutants that may contribute to storm water contamination (Group B).

Although the difficulty in differentiating Group A facilities from existing Phase I regulated activities makes quantitative analysis difficult, EPA estimates that there are approximately 100,000 facilities in this group. Facilities in Group A, which may be of high priority for Phase II due to their similarity to Phase I industrial facilities, are described and categorized in this report but are not included in the subsequent geographical analysis in the same level of detail as group B facilities. Activities identified in group A can be classified into a number of distinct categories which are listed below.

- Auxiliary facilities or secondary activities: SIC codes are assigned on the basis of the most significant activity from a financial standpoint that is taking place at a particular facility. Facilities with industrial activities that are in support of, or auxiliary to, a non-regulated activity would not be covered under Phase I. Examples include maintenance of construction equipment and vehicles, and local trucking for an unregulated facility (grocery stores etc.).
- Facilities intentionally omitted from Phase I: Another class of facilities which are not addressed under Phase I are those that are related to, but were intentionally omitted from, one of the 11 industrial categories. For example, category ix does not cover treatment works with a design flow of less than 1 MGD, and category v does not address landfills that have not received industrial waste. While these activities may be slightly different from Phase I activities in size, scope, or specific materials present, there are many similarities which may make these facilities a potential concern in Phase II.
- Facilities exempted by the Transportation Act: The Intermodal Surface Transportation Efficiency Act of 1991 (Transportation Act) exempted most industrial activities owned or operated by municipalities of less than 100,000 people from permit coverage under Phase I⁵. This exemption applies to approximately 19,000 incorporated places and 17,000 minor civil divisions in over 3000 counties. It is important to note that these activities are identical to Phase I facilities and are not located in municipalities which are covered under Phase I.

Group B consists of nearly one million facilities in 90 SICs. These 90 SIC categories have been organized into 18 Phase II "sectors" for the purposes of this report. Of these 18 sectors, the automobile service sector (comprised of gas/service stations (SIC 5541), general automobile repair (SIC 7538), top, body repair (SIC 7532), repair shops and services (SIC 7699), car dealers, new & used (SIC 5511), car dealers, used only (SIC 5521), car washes (SIC 7542), passenger car rental (SIC 7514), truck rental (SIC 7513), parking structures (SIC 7521), and misc. auto services (SIC 7549)) —make up more than one-third of the total number of facilities identified in all 18 sectors.

⁵ The Transportation Act of 1991 exempted industrial activities owned or operated by municipalities of less than 100,000 population from Phase I permitting requirements with the exception of powerplants, airports, and uncontrolled sanitary landfills.

Nature of Phase II Sources

There is little quantitative or comprehensive data from a national perspective on the nature (concentrations and loadings) of storm water discharges from the industrial, commercial, and retail facilities selected for study as potential Phase II sources. As a result, it is not currently possible to estimate national concentrations or loadings from these sources.

The qualitative information collected through a literature search leads to several generalizations about the nature of pollutants from potential Phase II sources. It is clear that a significant number of facilities remain in unregulated Phase II categories that conduct operations that have the potential to discharge contaminated storm water. It is possible to classify the unregulated categories into three major groups:

- All of the potential Phase II facilities in group A have the potential to have discharges similar or identical to discharges associated with industrial activity regulated under Phase I.
- 80 percent of the facilities in group B have the potential to have discharges similar or identical to discharges associated with industrial activity regulated under Phase I. Facilities in this class have activities analogous to Phase I activities but are covered by different SIC codes. These facilities are also likely to employ substances that could result in pollutants, such as toxics, metals, solvents and oil and grease, entering storm water⁶. This class includes wholesale operations and vehicle repair and maintenance categories.
- Almost 20 percent of the facilities in group B had activities that resemble agricultural sources or other generally rural sources but do not fall under the statutory exclusion of agriculture. These include feedlots, nurseries, retailers of farm supply chemicals, and failing septic systems. Facilities in this class are likely to have activities that would result in contributions of pesticides or fertilizers and nutrients to storm water.

⁶ About 2 percent of these facilities conduct other activities that may use toxic pollutants but are not substantially similar to the other facilities in this group. These include research laboratories and some kinds of municipal or governmental entities, which may engage in a wide variety of activities. There is very little information available about the pollution potential of facilities in this class.

Sampling results from Phase I permit applicants also provide some insight into the nature of storm water discharges from potential Phase II sources. In general, industries with large areas of industrial activity and significant materials exposed to storm water exhibited the highest concentrations of pollutants in their storm water discharges. Suspended solids, which can also carry metals and organic pollutants, appear to be the pollutant with the highest concentrations overall. Chemical oxygen demand appears at relatively high concentration levels in some industrial sectors. Oil and grease results were highly variable but highest in industrial sectors associated with transportation and vehicle and machinery maintenance. Results for metals varied across industrial sectors, but those that handle, process, manufacture, or mine metals, as well as landfills, had higher concentrations than other categories. Biochemical oxygen demand, and nutrients (nitrogen and phosphorus) were generally not found at high concentration levels in Phase I data, although results were variable for nutrients.

Geographic Distribution

The discussion of Phase II facility location (Section 4.2.2) provides a quantitative linkage between the municipal analysis in Chapter 3 and the potential Phase II industrial and commercial facilities examined in Chapter 4. The geographical analysis shows that the majority of industrial and commercial facilities are located in or near population centers (cities and other urban places). To the extent that they are located in populous, urbanized areas, they are more likely to be served by municipal storm sewers (either separate or combined) than to be discharging directly to streams. The results of this analysis are presented in Table ES-2.

In general, about 30 percent of potential Phase II facilities are found within the geographic jurisdiction of a Phase I municipality. An additional 20 to 30 percent of Phase II facilities fall into census-designated urbanized areas. Thus, nearly twice as many industrial facilities are found in all urbanized areas as are found in Phase I municipalities alone.

Table ES-2. Geographic Distribution of Potential Phase II Facilities in Relation to Urbanized Areas

Percentage of Facilities in Parts of Counties Associated with...			Overview 1	
			"UA" by Affiliation (cum)	
Description	Count	% Phase I	% Phs I + UAs	% All UAs
Phase II - Group A	100,000 ¹	32	45	61
Phase II - Group B	1,015,239	28	40	56
Group B "Sectors"				
Automotive Service	369,870	27	38	55
Machinery & Electrical Repair	135,744	29	40	56
Intensive Ag. Chemical Use	121,861	26	38	54
Wholesale, Machinery	77,562	32	47	65
Laundries	51,376	38	52	71
Wholesale, Wood Products	48,593	26	36	53
Livestock, Feedlots	43,421 ²	8	11	20
Petrol. Pipelines & Distributors	35,319	16	25	39
Photographic Activities	30,684	40	53	70
Various Utilities	22,242	24	36	53
Extensive Ag Chem Use	18,992	31	42	62
Transport, Rail and Other	14,808	47	64	81
Wholesale, Metal Products	14,303	36	54	75
Wholesale, Food	11,372	36	49	67
Laboratories	10,683	38	56	74
Munic. Services, Vehicle Maint	4,611	25	35	51
National Security	2,414	34	43	60
Wholesale, Coal & Ores	1,384	23	31	48

¹ This figure is an approximation based on the total number of facilities in SIC codes 10 through 45 after subtracting an estimate of the number of facilities covered under Phase I. Geographical distribution information is based on all facilities in SIC codes 10 through 45, and may not be representative of all classes facilities in this group. For the geographic distribution of specific SIC codes, refer to Appendix G.

² This number is based on SIC codes and does not reflect all feedlots potentially subject to Phase II. The United States Department of Agriculture has estimated that there are approximately 38,000 animal feeding operations between 300 and 1000 animal units, and an additional 760,000 farms with fewer than 300 animal units. The facilities identified here should be representative of feedlots in general and allow estimation of the distribution of these facilities as a class.

Notable exceptions to this generalization include lawn/garden establishments, feedlots, wholesale livestock, farm and garden machinery repair, bulk petroleum wholesale, farm supplies, lumber and building materials, agricultural chemical dealers, failing septic systems, and petroleum pipelines, which are (relatively) more frequently associated with smaller municipalities or rural areas. Because a larger portion of these facilities are outside the confines of regulated municipalities, a larger portion of storm water discharges from these facilities may be going directly to receiving waters rather than into municipal separate storm sewer systems.

Table 2-4. Industrial Facilities That Must Submit Applications for Storm Water Permits (Phase I) (continued)

40 CFR 122.26(b)(14) Subpart	Description
(ix)	Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including lands dedicated to the disposal of the sewage sludge that are located within the confines of the facility, with a design flow of 1.0 million gallons per day or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens, or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the CWA.
(x)	Construction activity including clearing, grading, and excavation activities except operations that result in the disturbance of less than 5 acres of total land area and those that are not part of a larger common plan of development or sale.
(xi)	<p>Facilities under the following SICs [which are not otherwise included in categories (ii)-(x)], including only storm water discharges where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts, or industrial machinery are exposed to storm water.</p> <p>SIC 20 Food and Kindred Products SIC 21 Tobacco Products SIC 22 Textile Mill Products SIC 23 Apparel and Other Textile Products SIC 2434 Wood Kitchen Cabinets SIC 25 Furniture and Fixtures SIC 265 Paperboard Containers and Boxes SIC 267 Converted Paper and Paper Board Products (except containers and boxes) SIC 27 Printing and Publishing SIC 283 Drugs SIC 285 Paints, Varnishes, Lacquer, Enamels SIC 30 Rubber and Misc. Plastics Products SIC 31 (except 311) Leather and Leather Products SIC 323 Products of Purchased Glass SIC 34 (except 3441) Fabricated Metal Products SIC 35 Industrial Machinery and Equipment, except Electrical SIC 36 Electronic and Other Electric Equipment SIC 37 (except 373) Transportation Equipment SIC 38 Instruments and Related Products SIC 39 Miscellaneous Manufacturing Industries SIC 4221 Farm Products Warehousing and Storage SIC 4222 Refrigerated Warehousing and Storage SIC 4225 General Warehousing and Storage</p>

Source: Federal Register, Vol. 55, No. 222, p. 48065, November 16, 1990.

Note: On June 4, 1992, the U.S. Court of Appeals for the Ninth Circuit remanded the exemption for construction sites of less than five acres and for manufacturing facilities in category (xi) which do not have materials or activities exposed to storm water to the EPA for further rulemaking. (Nos. 90-70671 & 91-70200). In response to the remands, the Agency intends to conduct further rulemakings on both the light manufacturing and the construction activities. In the December 18, 1992 Federal Register, EPA stated that it is not requiring permit applications from construction activity under five acres or light industry without exposure until this further rulemaking is completed. Source: Federal Register, Vol. 55, No. 222, p. 48065, November 16, 1990.

Table 2-4. Industrial Facilities That Must Submit Applications for Storm Water Permits (Phase I)

40 CFR 122.26(b)(14) Subpart	Description
(i)	Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutants effluent standards under 40 CFR, Subchapter N [except facilities which are exempt under category (xi)].
(ii)	Facilities classified as: SIC 24 (except 2434) Lumber and Wood Products SIC 26 (except 265 and 267) . . . Paper and Allied Products SIC 28 (except 283 and 285) . . . Chemicals and Allied Products SIC 29 Petroleum and Coal Products SIC 311 Leather Tanning and Finishing SIC 32 (except 323) Stone, Clay and Glass Products SIC 33 Primary Metal Industries SIC 3441 Fabricated Structural Metal SIC 373 Ship and Boat Building and Repairing
(iii)	Facilities classified as SIC 10 through 14, including active or inactive mining operations and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of such operations. SIC 10 Metal Mining SIC 11 Anthracite Mining SIC 12 Coal Mining SIC 13 Oil and Gas Extraction SIC 14 Nonmetallic Minerals, except Fuels
(iv)	Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA).
(v)	Landfills, land application sites, and open dumps that receive or have received any industrial wastes including those that are subject to regulation under subtitle D or RCRA.
(vi)	Facilities involved in the recycling of material, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but not limited to those classified as: SIC 5015 Motor Vehicle Parts, Used SIC 5093 Scrap and Waste Materials
(vii)	Steam electric power generating facilities, including coal handling sites.
(viii)	Transportation facilities which have vehicle maintenance shops, equipment cleaning operations, or airport de-icing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport de-icing operations, or which are otherwise listed in another category, are included. SIC 40 Railroad Transportation SIC 41 Local and Suburban Transit SIC 42 (except 4221-25) Motor Freight and Warehousing SIC 43 U.S. Postal Service SIC 44 Water Transportation SIC 45 Transportation by Air SIC 5171 Petroleum Bulk Stations and Terminals

Table 4-3. Categories of Activities Not Regulated Under Phase I

Category	Activities and Facilities
i	<ul style="list-style-type: none"> Facilities that were not considered for inclusion in the effluent guideline formulations.
ii	<ul style="list-style-type: none"> Offsite warehouses (unless auxiliary to a regulated facility) Offsite salt storage piles Chemical distributors that conduct incidental mixing and blending of products Distributors of farm products and equipment with mixing and blending of fertilizers (not SIC 2875) Universities/prisons/other facilities that have secondary manufacturing activities DOD/DOE production sites (similar to manufacturing and test facilities)
iii	<ul style="list-style-type: none"> Pipelines Petroleum product distribution, including SIC 49
iv	<ul style="list-style-type: none"> Hazardous waste generation/storage sites subject to certain RCRA Subtitle C requirements but not permitting
v	<ul style="list-style-type: none"> Landfills that have not received or do not receive industrial waste (Municipal Solid Waste Landfills (MSWLFs)) Solid waste transfer stations with no vehicle maintenance or which are owned or operated by the entity that owns the final disposal site Land application of sewage treatment plant effluent (exempted from RCRA requirements) Incinerators (BIFs and municipal incinerators) (hazardous waste incinerators are permitted under RCRA Subtitle C and therefore are regulated under Phase I) Temporary offsite waste storage sites.
vi	<ul style="list-style-type: none"> Interim recycling facilities (collection sites, satellite storage sites)
vi	<ul style="list-style-type: none"> Facilities that generate electricity, but not using steam electric generation.
viii	<ul style="list-style-type: none"> General equipment and vehicle storage/maintenance yards (municipal fire trucks, police cars, park maintenance; construction equipment yards) Vehicle maintenance of garbage collection trucks owned by landfill operator SIC 40-45 facilities without vehicle maintenance Material handling/storage areas at SIC 40-45 facilities State DOT equipment maintenance/storage facilities School bus maintenance facilities owned or operated by school districts Mining related equipment maintenance Warehouses under SIC 4226 that do not have vehicle maintenance Petroleum product wholesalers (SIC 5172) and bulk stations (SIC 5171) without vehicle maintenance.
ix	<ul style="list-style-type: none"> Treatment works with design flows less than 1 MGD (Transportation Act of 1991 exempted POTWs owned or operated by municipalities with population less than 100,000) Offsite non-domestic sewage treatment plants and sludge drying beds Portable sanitary and septage service facilities Water treatment plants.
x	<ul style="list-style-type: none"> Construction operations that result in the disturbance of less than five acres of total land area are under review due to a court opinion on <u>Natural Resources Defense Council v. EPA</u> (966 F. 2d 1292).
xi	<ul style="list-style-type: none"> Facilities where there is no exposure of material are under review due to a court opinion on <u>Natural Resources Defense Council v. EPA</u> (966 F. 2d 1292).



NPDES Storm Water Program

Question And Answer Document Volume 1



NPDES

Storm Water Program

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**U.S. Environmental Protection Agency
Office of Wastewater Enforcement and Compliance
Permits Division
401 M Street, SW
Washington, DC 20460**

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INDUSTRIAL PERMIT APPLICATION QUESTIONS AND ANSWERS

Category I - Facilities subject to storm water effluent guidelines, new source performance standards, or toxic pollutant effluent standards.

1. What kinds of facilities are included under category (I)?

Category (I) includes facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under Title 40 subchapter N of the Code of Federal Regulations (CFR) (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of the definition of storm water discharge associated with industrial activity). The term "storm water" modifies only "effluent limitations guidelines." Facilities subject to subcategories with new source performance standards, toxic pollutant effluent standards, or storm water effluent limitation guidelines are required to submit a National Pollutant Discharge Elimination System (NPDES) permit application for storm water discharges associated with industrial activity.

2. What kinds of facilities are subject to storm water effluent guidelines?

The following categories of facilities have storm water effluent guidelines for at least one of their subcategories: cement manufacturing (40 CFR 411); feedlots (40 CFR 412); fertilizer manufacturing (40 CFR 418); petroleum refining (40 CFR 419); phosphate manufacturing (40 CFR 422); steam electric power generation (40 CFR 423); coal mining (40 CFR 434); mineral mining and processing (40 CFR 436); ore mining and dressing (40 CFR 440); and asphalt (40 CFR 443). A facility that falls into one of these general categories should examine the effluent guideline to determine if it is categorized in one of the subcategories that have storm water effluent guidelines. If a facility is classified as one of those subcategories, that facility is subject to the standards listed in the CFR for that category, and as such, is required to submit a storm water discharge permit application.

3. What kinds of facilities are subject to "toxic pollutant effluent standards"?

First, it is important to understand the term toxic pollutant. Toxic pollutants refers to the priority pollutants listed in Tables II and III of Appendix D to 40 CFR part 122 (not 40 CFR Part 129). If any of these toxic pollutants are limited in an effluent guideline to which the facility is subject (including pretreatment standards), then the facility must apply for a storm water permit. The following

categories of facilities have toxic pollutant effluent standards for at least one subcategory:

Textile mills (40 CFR 410)
Electroplating (40 CFR 413)
Organic chemicals, plastics, and synthetic fibers (40 CFR 414)
Inorganic chemicals (40 CFR 415)
Petroleum refining (40 CFR 419)
Iron and steel manufacturing (40 CFR 420)
Nonferrous metals manufacturing (40 CFR 421)
Steam electric power generating (40 CFR 423)
Ferroalloy manufacturing (40 CFR 424)
Leather tanning and finishing (40 CFR 425)
Glass manufacturing (40 CFR 426)
Rubber manufacturing (40 CFR 428)
Timber products processing (40 CFR 429)
Pulp, paper, and paperboard (40 CFR 430)
Metal finishing (40 CFR 433)
Pharmaceutical manufacturing (40 CFR 439)
Ore mining and dressing (40 CFR 440)
Pesticide chemicals (40 CFR 455)
Photographic processing (40 CFR 459)
Battery manufacturing (40 CFR 461)
Metal molding and casting (40 CFR 464)
Coil coating (40 CFR 465)
Porcelain enameling (40 CFR 466)
Aluminum forming (40 CFR 467)
Copper forming (40 CFR 468)
Electrical and electronic components (40 CFR 469)
Nonferrous metals forming and metal powders (40 CFR 471)

4. **What kinds of facilities are subject to "new source performance standards"?**

Most effluent guidelines listed in subchapter N contain New Source Performance Standards (NSPS). A facility that is subject to a NSPS as defined for that particular effluent guideline is required to submit a permit application for the storm water discharges associated with industrial activity at that site. The definition of a new source varies based on the publication date of the particular effluent guideline.

The following categories of 40 CFR Subchapter N facilities do not have new source performance standards. All other categories have at least one subcategory with new source performance standards.

Oil and Gas Extraction (40 CFR 435)
Mineral Mining and Processing (40 CFR 436)
Gum and Wood Chemicals Manufacturing (40 CFR 454)
Pesticide Chemicals (40 CFR 455)
Explosives Manufacturing (40 CFR 457)
Photographic (40 CFR 459)
Hospital (40 CFR 460)

5. **If a facility is included under the description of both category (i) and category (xi), is that facility required to submit a storm water permit application if material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are not exposed to storm water?**

The answer depends on why the facility is included in category (i). If the facility is included in category (i) because it is subject to storm water effluent standards or new source performance standards, the facility is required to apply for a permit regardless of whether it has exposure or not. Facilities that are included in category (i) only because they have toxic pollutant effluent standards are not required to submit an application if they indeed have no exposure to material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery.

Categories ii, iii, vi, viii, and xi

6. **What industrial groups are covered by Standard Industrial Classification (SIC) codes that are used in the definition of storm water discharge associated with industrial activity?**

The following SIC codes and associated industries are included in the indicated categories of the definition:

Category (ii)

- 24 (except 2434) - Lumber and Wood Products (except wood kitchen cabinets)
- 26 (except 265 and 267) - Paper and Allied Products (except paperboard containers and products)
- 28 (except 283 and 285) - Chemicals and Allied Products (except drugs and paints)
- 29 - Petroleum Refining Industries
- 311 - Leather Tanning and Finishing

- 32 (except 323) - Stone/Clay/Glass and Concrete Products (except glass products made of purchased glass)
- 33 - Primary Metal Industries
- 3441 - Fabricated Structural Metals
- 373 - Ship and Boat Building and Repairing

Category (iii)

- 10 - Metal Mining
- 12 - Coal Mining
- 13 - Oil and Gas Extraction
- 14 - Nonmetallic Minerals

Category (vi)

- 5015 - Motor Vehicles Parts, Used
- 5093 - Scrap and Waste Materials

Category (viii)

- 40 - Railroad Transportation
- 41 - Local Passenger Transportation
- 42 (except 4221-4225) - Trucking and Warehousing (except public warehousing and storage)
- 43 - U.S. Postal Service
- 44 - Water Transportation
- 45 - Transportation by Air
- 5171 - Petroleum Bulk Stations and Terminals

Category (xi)

- 20 - Food and Kindred Products
- 21 - Tobacco Products
- 22 - Textile Mill Products
- 23 - Apparel Related Products
- 2434 - Wood Kitchen Cabinets Manufacturing
- 25 - Furniture and Fixtures
- 265 - Paperboard Containers and Boxes
- 267 - Converted Paper and Paperboard Products
- 27 - Printing, Publishing, and Allied Industries
- 283 - Drugs
- 285 - Paints, Varnishes, Lacquer, Enamels, and Allied Products
- 30 - Rubber and Plastics
- 31 (except 311) - Leather and Leather Products (except leather tanning and finishing)
- 323 - Glass Products
- 34 (except 3441) - Fabricated Metal Products (except fabricated structural metal)

- 35 - Industrial and Commercial Machinery and Computer Equipment
- 36 - Electronic and Other Electrical Equipment and Components
- 37 (except 373) - Transportation Equipment (except ship and boat building and repairing)
- 38 - Measuring, Analyzing, and Controlling Instruments
- 39 - Miscellaneous Manufacturing Industries
- 4221-4225 - Public Warehousing and Storage

Category III - Mining and Oil & Gas Operations

7. Are inactive mines included in the regulation?

Two conditions must be met for an inactive mine to be required to submit a storm water discharge permit application. First, the facility must have a discharge of storm water that has come into contact with any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of the facility. The second condition depends on the type of mining activity.

Inactive non-coal mining operations must apply until such sites are released from applicable State or Federal reclamation requirements after December 17, 1990. Non-coal mining operations released from applicable State or Federal requirements before December 17, 1990, must apply for an NPDES storm water discharge permit if the storm water discharges are contaminated as discussed above.

Inactive coal mining operations must apply unless the performance bond issued to the facility by the appropriate Surface Mining Control and Reclamation Act (SMCRA) authority has been released.

8. Are any oil & gas exploration, production, processing, or treatment operations, or transmission facilities classified under SIC code 13, exempt from having to apply for a storm water permit?

Yes, such facilities are exempt unless they have discharged storm water after November 16, 1987, containing a Reportable Quantity (RQ) of a pollutant for which notification is or was required pursuant to 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6; or if a storm water discharge from the facility contributes to a violation of a water quality standard, as set forth in 40 CFR 122.26(c)(1)(iii).

9. What is a reportable quantity for discharges from an oil or gas operations?

As defined at 40 CFR 110.6, an RQ is the amount of oil that violates applicable water quality standards or causes a film or sheen upon or a discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines (40 CFR part 110.6). The RQs for other substances are listed in 40 CFR 117.3 and 302.4 in terms of pounds released over any 24-hour period.

10. Are access roads for mining operations covered?

Any construction that disturbs 5 acres or more of total land area must apply for a storm water discharge permit.

After construction, roads for mining operations would not be included unless storm water runoff from such roads mixes with storm water that is contaminated by contact with overburden, raw materials, intermediate products, finished products, byproducts, or waste products. When roads are constructed out of materials such as overburden or byproducts, an application for an NPDES storm water discharge permit would be required.

Category iv - Hazardous Waste Treatment, Storage, or Disposal Facilities

11. Is a facility that stores hazardous waste less than 90 days required to submit an application?

It is EPA's intent to cover those facilities that are operating under interim status or permit under the Resource Conservation and Recovery Act (RCRA) subtitle C. As such, only facilities meeting the definition of a hazardous waste treatment, storage, or disposal facility under RCRA are expressly included in this category. A facility that stores hazardous waste less than 90 days is not considered to be a treatment, storage, or disposal facility, and therefore is not required to submit a storm water permit application.

Category v - Landfills, Land Application Sites and Open Dumps

12. Do closed or inactive landfills need to apply for a permit?

Yes. Any landfill, active, inactive or closed, must apply for a permit if it receives, or has received, wastes from the industrial facilities identified under 122.26(b)(14)(i)-(xi). To the extent that control measures and best management practices address storm water, the permit may incorporate those control measures.

13. Does a landfill that receives only the office waste and/or cafeteria waste from industrial facilities have to apply for an NPDES permit?

No. Only landfills that receive or have received waste from manufacturing portions of industrial facilities need to apply for a permit.

Category vi - Recycling Facilities

14. Are gas stations or repair shops that collect tires or batteries classified in the "recycling" category?

No. Only those facilities classified in SIC codes 5015 (used motor vehicle parts) and 5093 (scrap and waste materials) are in the "recycling" category. This includes facilities such as metal scrap yards, battery reclaimers, salvage yards, and automobile junk yards.

15. Are municipal waste collection sites included in category (vi)?

No. Municipal waste collection sites where bottles, cans, and newspapers are collected for recycling purposes are not classified as SIC codes 5015 or 5093.

Category vii - Steam Electric Power Generating Facilities

- 16. Are offsite transformer areas regulated under the NPDES storm water rule?**

No. Upon examination of the Toxic Substances Control Act, EPA determined that the regulation of storm water discharges from these facilities should be studied under Section 402(p)(5) of the Clean Water Act (CWA) (55 FR 48013). Future regulations may be developed to address these areas.

- 17. Are storm water discharges from electrical substations included in the definition of industrial activity?**

No. Electrical substations are not covered by this regulation.

- 18. Are storm water discharges from coal piles that are located offsite from the power station included in the definition of industrial activity?**

No. Offsite coal piles are not covered by this regulation. In order to be included, a coal pile must be located on the site of a facility defined by the regulation as being "engaged in an industrial activity."

- 19. Are storm water discharges from co-generation facilities included in the definition of industrial activity?**

A heat capture co-generation facility is not covered under the definition of storm water discharge associated with industrial activity; however, a dual fuel co-generation facility is included and therefore must submit an application for the storm water discharges associated with industrial activity.

- 20. Are university power plants included in the definition of industrial activity?**

Yes. A university steam electric power generating facility is required to apply for a storm water discharge permit.

Category VIII - Transportation Facilities

- 21. Are gas stations and automotive repair shops required to apply for an NPDES storm water discharge permit?**

No. These facilities are classified in SIC codes 5541 (gasoline filling stations) and 7538 (automotive repair shops). The storm water rule generally does not address facilities with SIC classifications pertaining to wholesale, retail, service or commercial activities. Additional regulations addressing these sources may be developed under Section 403(p)(6) of the CWA if studies required under Section 402(p)(5) indicate the need for regulation.

- 22. Does a vehicle maintenance shop or an equipment cleaning facility need to apply for a permit?**

Yes, if the shop is categorized by the SIC codes listed in the transportation category of facilities engaged in industrial activity [i.e., SIC codes 40, 41, 42 (except 4221-25) 43, 44, 45 and 5171]. Only the vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) and equipment cleaning areas (such as truck washing areas) must be addressed in the application.

As explained above, gas stations are classified in SIC code 5541 and automotive repair services are classified as SIC code 75, which are not included in the regulatory definition of industrial activity, and therefore are not required to submit NPDES storm water discharge permit applications.

- 23. Are municipally owned and/or operated school bus maintenance facilities required to apply for an NPDES permit?**

No. The SIC Manual states that "school bus establishments operated by educational institutions should be treated as auxiliaries" to the educational institution. Since the SIC code assigned to educational institutions is 82, the municipally operated (i.e., by a school board, district, or other municipal entity) school bus establishments would not be required to apply for an NPDES permit for their storm water discharges. Private contract school bus services are required to apply for an NPDES permit for their storm water discharges.

24. Is SIC code 4212 always assigned to facilities with dump trucks?

No. The maintenance facility must be primarily engaged in maintaining the dump truck to be characterized as SIC code 4212. Dump trucks used for road maintenance and construction and facilities that maintain these trucks are classified under SIC code 16 (heavy construction other than building construction) and therefore would not be characterized as engaging in industrial activity.

25. How does a municipality determine what type of vehicle a particular maintenance facility is primarily engaged in servicing?

The SIC Manual recommends using a value of receipts or revenues approach to determine what is the primary activity of a facility. For example, if a maintenance facility services both school buses and intercity buses, the facility would total receipts for each type of vehicle and whichever generated the most revenue, would be the vehicle type that the facility is primarily engaged in servicing. If data on revenues and receipts are not available, the number of vehicles and frequency of service may be compared. If a facility services more than two types of vehicles, whichever type generates the most (not necessarily greater than half of the total) revenue, or is most frequently serviced, is the vehicle type the facility is primarily engaged in servicing.

26. Is a municipal maintenance facility that is primarily engaged in servicing garbage trucks required to apply for a permit?

The answer depends on the SIC code assigned to the establishment. If the municipality also owns the disposal facility (e.g., landfill, incinerator) that receives refuse transported by the trucks, then the maintenance facility would be classified as SIC code 4953 and thus would not be required to apply for a permit unless the maintenance facility was located at a facility covered under one of the other categories of industrial activity (e.g., a landfill that receives industrial waste). If, however, the municipality does not own the disposal facility, the truck maintenance facility would be classified as SIC code 4212 and thus would be required to apply for a permit. If other vehicles are serviced at the same maintenance facility, the facility may not be required to submit a permit application (see question #25 above).

27. Are fire trucks or police cars included in the transportation SIC codes?

No. The operation of fire trucks and police cars are classified under public order and safety (SIC code 92); therefore, the operator of a facility primarily engaged in servicing those vehicles would not be required to apply for a permit.

28. Do all airports need to apply for a storm water discharge permit?

No, only those airports classified as SIC code 45. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning, or airport deicing or which are otherwise identified under 122.26(b)(14)(i)-(vii) or (ix-xi) are required to be permitted. Airports that are not engaged in such activities do not require storm water discharge permits. Facilities primarily engaged in performing services that incidentally use airplanes (e.g., crop dusting and aerial photography) are classified according to the service performed.

29. Is the deicing of airplanes, runways, or both included in airport deicing operations?

Airports or airline companies must apply for a storm water discharge permit for locations where deicing chemicals are applied. This includes, but is not limited to, runways, taxiways, ramps, and areas used for the deicing of airplanes. The operator of the airport should apply for the storm water discharge permit with individual airline companies included as co-applicants.

30. Who is responsible for seeking permit coverage at an airport that has many companies using the facility and discharging storm water?

The operator is responsible for seeking coverage. EPA strongly encourages cooperation between the airport authority and all operating airlines at that airport. Each operator is responsible for coordinating with the others and they may act as co-applicants. Please note that under 122.26(a)(6) the Director has the discretion to issue individual permits to each discharger or to issue an individual permit to the airport operator and have other dischargers to the same system act as co-permittees to the permit issued to the airport operator.

31. Are railroad facilities included?

Railroad facilities, classified as SIC code 40, which have vehicle maintenance activities, equipment cleaning operations or are otherwise identified under 122.26(b)(14)(i)-(vii) or (ix)-(xi) need to apply for a permit.

32. Are repairs along a railroad system considered to be vehicle maintenance and thus regulated?

No. Only nontransient vehicle maintenance shops are included in the transportation category.

33. Are tank farms at petroleum bulk storage stations covered by the rule?

No, unless the storm water discharge from the tank farm area commingles with storm water from any vehicle maintenance shops or equipment cleaning operations located onsite. However, tank farms located onsite with other industrial facilities, as defined in 122.26(b)(14), are included in the regulation.

34. Is a parking lot associated with a vehicle maintenance shop included in the regulation?

Yes. Under 122.26 (b)(14)(viii) vehicle maintenance and equipment cleaning operations are considered industrial activity. Parking lots used to store vehicles prior to maintenance are considered to be a component of the vehicle maintenance activity.

35. Is the fueling operation of a transportation facility (SIC codes 40 through 45) covered if there are no other vehicle maintenance activities taking place at the facility?

Yes. A nonretail fueling operation is considered vehicle maintenance [see 122.26(b)(14)(viii)] and requires an NPDES storm water discharge permit application.

36. Is a manufacturing facility's offsite vehicle maintenance facility required to apply for a permit under the transportation category?

No. An offsite vehicle maintenance facility supporting one company would not be required to apply for a permit if that company is not primarily engaged in providing transportation services and therefore would not be classified as SIC

code 42. The maintenance facility would be considered an auxiliary operation to the manufacturing facility. For a full discussion on auxiliary facilities see page 13 through 17 of the 1987 Standard Industrial Classification Manual. If the maintenance facility is located on the same site as the manufacturing operation, it would be included in the areas associated with industrial activity and must be addressed in an application.

37. Is a marina required to apply for a storm water permit if it operates a retail fueling operation, but other vehicle maintenance or equipment cleaning activities are not conducted onsite?

Facilities that are "primarily engaged" in operating marinas are best classified as SIC 4493 - marinas. These facilities rent boat slips, store boats, and generally perform a range of other marine services including boat cleaning and incidental boat repair. They frequently sell food, fuel, fishing supplies, and may sell boats. For facilities classified as 4493 that are involved in vehicle (boat) maintenance activities (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) or equipment cleaning operations, those portions of the facility that are involved in such vehicle maintenance activities are considered to be associated with industrial activity and are covered under the storm water regulations.

Facilities classified as 4493 that are not involved in equipment cleaning or vehicle maintenance activities (including vehicle rehabilitation, mechanical repairs, painting, and lubrication) are not intended to be covered under 40 CFR Section 122.26(b)(14)(viii) of the storm water permit application regulations. The retail sale of fuel alone at marinas, without any other vehicle maintenance or equipment cleaning operations, is not considered to be grounds for coverage under the storm water regulations.

Marine facilities that are "primarily engaged" in the retail sale of fuel and lubricating oils are best classified as SIC code 5541 - marine service stations - and are not covered under 40 CFR Section 122.26(b)(14)(viii) of the storm water permit application regulations. These facilities may also sell other merchandise or perform minor repair work.

Facilities "primarily engaged" in the operation of sports and recreation services such as boat rental, canoe rental, and party fishing, are best classified under SIC code 7999 - miscellaneous recreational facilities - and are not covered under 40 CFR Section 122.26(b)(14)(viii).

Category IX - Sewage Treatment Works

- 38. Are storm water permit applications required for offsite (i.e., physically separated from the main treatment works property) pumping stations?**

No, storm water permit applications are not required for such sites.

- 39. Are separate permit applications required for vehicle maintenance/washing facilities (located either onsite or offsite) associated with a wastewater treatment plant and owned/operated by the wastewater treatment agency?**

Offsite vehicle maintenance facilities would not be required to submit applications unless they serve multiple clients since they do not fit the SIC codes listed in the transportation category of facilities engaged in industrial activity. Onsite vehicle maintenance/cleaning operations are associated with industrial activity and must be included in the application.

- 40. Do wastewater treatment facilities that collect their storm water runoff and treat the storm water as part of the normal inflow that is processed through the treatment plant have to apply for a permit?**

No. If a facility discharges its storm water into the headworks of the treatment plant, it is essentially the same as discharging to a combined system or to a sanitary system and is therefore exempt from the requirements of 122.26(c).

- 41. The definition states that offsite areas where sludge is beneficially reused are not included as storm water discharges associated with industrial activity. How is beneficial reuse defined?**

Beneficial sludge reuse is the application of sludge as a nutrient builder or soil conditioner. Examples include agricultural or domestic application.

Category x - Construction Activities

42. **Is a construction site of five acres or more subject to the same deadline as other industrial facilities?**

The individual application deadline for all storm water discharges associated with industrial activity is 10/1/92. If a construction activity is completed by 10/1/92, an application is not required.

43. **What is the duration of an NPDES permit issued for a construction activity?**

The permit will be effective as long the construction activity continues, but no longer than five years. If the construction continues beyond five years, the owner/operator must apply for a new permit.

44. **Does the construction category only include construction of industrial buildings?**

No. Any construction activity, including clearing, grading, and excavation, that results in the disturbance of five acres of land or more in total is covered by the rule. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity. However, this does not apply to agricultural or silvicultural activities, which are exempt from NPDES permit requirements under 40 CFR 122.4.

45. **Does the rule require that storm water discharges after construction be addressed?**

Yes. The individual application must describe proposed measures to control pollutants in storm water discharges that will occur after construction operations are complete, including a description of State and local erosion and sediment control specifications.

Please Note: EPA believes that construction activities should be covered under a storm water general permit wherever possible. 40 CFR 122.21(c)(1) allows the permitting authority to establish different and shorter submittal dates under the specific terms of a particular general permit.

46. **The definition states that the operators of construction activity that disturb less than five acres are not required to apply for a permit unless that construction is part of a larger common plan of development or sale. What is meant by "part of a larger common plan of development or sale"?**

"Part of a larger common plan of development or sale" is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. Thus, if a distinct construction activity has been identified onsite by the time the application would be submitted, that distinct activity should be included as part of the larger plan.

47. **Who is responsible for applying for a storm water permit?**

The operator is responsible for applying for the permit as required by 122.21(b). In the case of construction, the owner may submit an application for a construction activity if the operators have not yet been identified. However, once the operators have been identified, they must become either sole permittees or co-permittees with the owner. The operator is determined by who has day to day supervision and control of activities occurring at a site. In some cases, the operator may be the owner or the developer, at other sites the operator may be the general contractor.

Category xi - Light Industrial Facilities

48. **If a category (xi) facility has determined that there is no exposure of certain activities or areas listed in the definition to storm water and the operator does not file a permit application, how does the operator prove, if asked, that he/she did not need to apply?**

There are no requirements set forth under the November 16, 1990, rule. However, the operator may want to document the facility evaluation which led to the conclusion that there is no exposure to storm water. This documentation should be retained onsite. Some States may have specific requirements. A facility is advised to check with its NPDES permitting authority for additional requirements.

49. **Do those industries listed in 122.26(b)(14)(xi) that only have access roads and rail lines exposed to storm water need to apply for a permit?**

No. As stated in 122.26 (b)(14), facilities in category (xi) do not have to apply for a permit if storm water only is exposed to access roads and rail lines.

50. **If air pollution control equipment vents on the roof are exposed to storm water, does this constitute exposure and trigger a permit condition?**

No. The exposure of air pollution control equipment vents does not in itself constitute exposure. It is possible, however, that even with the use of air pollution control equipment, significant pollutants may be exposed to storm water. For example, if a cyclone, a common particulate control device, is used alone, only about 80 percent of the potential pollutants would be removed. 20 percent of the pollutants may then come into contact with storm water. In this case, a permit application is required.

51. **If there has been past exposure, can a facility change its operation to eliminate exposure, and thus become exempt?**

Yes. If a category (xi) facility can change its operation and eliminate all exposure, the facility may be exempt from the regulation. It is important to note, however, that eliminating exposure may include clean up as well.

52. **Is a covered dumpster containing waste material kept outside considered exposure?**

No, as long as the container is completely covered and nothing can drain out holes in bottom, or is lost in loading onto a garbage truck, this would not be considered exposure.

General Applicability

53. **How is a storm water outfall from an industrial site defined for the purpose of sampling?**

An industrial outfall is the point at which storm water associated with industrial activity discharges to waters of the United States or a separate storm sewer. Separate storm sewers may be roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains.

54. Are tank farms considered to be associated with industrial activity?

Yes, if they are located at a facility described in the definition of storm water discharge associated with industrial activity. Tank farms are used to store products and materials used or created by industrial facilities, and therefore are directly related to manufacturing processes. However, tank farms associated with petroleum bulk storage stations, classified as SIC code 5171, at which no vehicle maintenance or equipment cleaning operations occur, are exempt.

55. Is an offsite warehouse associated with a regulated industrial facility required to submit an application?

No. As stated on page 48011 of the preamble to the November 16, 1990, rule, warehouses of either preassembly parts or finished products that are not located at an industrial facility are not required to submit an application unless otherwise covered by the rule.

56. If a facility has more than one industrial activity, how many applications are required?

Only one application is required per facility. Permit conditions will address the various operations at the facility. The application must reflect all storm water discharges from areas associated with industrial activity as described in the definition at 122.26(b)(14). The activity in which a facility is primarily engaged determines what SIC code is assigned to that facility. To determine the activity in which a facility is primarily engaged, The SIC Manual recommends using a value of receipts or revenues approach. For example, if a facility manufactures both metal and plastic products, the facility would total receipts for each operation and the operation that generated the most revenue for the facility is the operation in which the facility is primarily engaged. If revenues and receipts are not available for a particular facility, the number of employees or production rate may be compared. If a facility performs more than two types of operations, whichever operation generates the most (not necessarily the majority) revenue or employs the most personnel, is the operation in which the facility is primarily engaged.

57. Are industrial facilities located in municipalities with fewer than 100,000 residents required to apply for a permit?

Yes. All industrial discharges of storm water through separate storm sewers or into waters of the United States must apply for an NPDES permit.

- 58. If the SIC code for the activity in which a facility is primarily engaged is not included in the definition of storm water discharge associated with industrial activity, but the facility has a secondary SIC code that is included in the definition, is the facility required to submit an NPDES storm water permit application?**

For purposes of this regulation, a facility's SIC code is determined based on the primary activity taking place at that facility. In the case described above, the facility is not required to apply for an NPDES storm water discharge permit. However, if the facility conducts an activity on the site identified in the narrative descriptions of categories (i), (iv), (v), (vii), or (x), then the facility would be required to submit an NPDES storm water permit application for portions of the facility used for the activities described in those categories.

- 59. Are military bases or other Federal facilities regulated under this rule?**

Yes. Industrial activities identified under 122.26(b)(14)(i)-(xi) that Federal, State, or Municipal governments own or operate are subject to the regulation.

- 60. Does the regulation require a permit for storm water discharges to a publicly owned treatment works?**

No. A discharge to a sanitary sewer or a combined sewer system is not regulated under the storm water regulation. Storm water discharges either to waters of the United States or separate storm sewer systems require a permit if associated with any of the industrial facilities listed in 122.26(b)(i) - (xi).

- 61. Are there any limits or size restrictions which narrow the scope of facilities requiring an application?**

The only restrictions regarding size are for construction activities and sewage treatment works. All construction activities must apply for permit coverage except for operations that disturb less than five acres of total land which are not part of a larger common plan of development or sale. Sewage treatment works designed to treat one million gallons per day or more must submit an NPDES permit application.

- 62. Do pilot plants or research and development facilities classified within one of the regulated SIC codes need to apply for a permit?**

A pilot plant or research facility classified by an SIC code which is specified under 122.26(b)(14)(i)-(xi) would be required to submit an application. A pilot plant or research facility's operations can be directly related to the manufacturing operations of the full-scale facility and therefore warrant a permit.

- 63. Are stockpiles of a final product from an industrial site that are located away from the industrial plant site, included under the definition of storm water discharge associated with industrial activity?**

Such stockpiles would not be covered because they are not located at the site of the industrial facility.

- 64. If a facility has a NPDES permit for its process wastewater and some, but not all, of its storm water discharges associated with industrial activity, does the operator need to apply?**

The operator must ensure that all storm water discharges associated with industrial activity are covered by an NPDES permit. The operator may wish to submit an individual application, participate in a group application, or seek coverage under a general permit for any remaining outfalls that are not covered by an existing NPDES permit. The permitting authority may also wish to modify the existing NPDES permit to cover the other storm water discharges.

- 65. A facility holds a recently renewed NPDES permit which does not cover storm water discharges. Does that facility need to apply?**

Yes. If the facility is identified in paragraph 122.26(b)(14)(i) through (xi) of the rule, that facility may wish to submit an individual application, participate in a group application, or seek coverage under a general permit for any remaining outfalls that are not covered by an existing NPDES permit. The permitting authority may also wish to modify or reissue the existing NPDES permit to cover the other storm water discharges.

- 66. If a regulated company owns and operates a subsidiary which is of a wholesale or commercial nature, would the subsidiary need to apply?**

No. Since the subsidiary facility's operations are of a wholesale or commercial orientation, the operations are not considered to be industrial and therefore

would not be covered by this rule unless they are specifically covered by one of the SIC codes or narrative descriptions in 122.26(b)(14).

67. Can an applicant claim confidentiality on information contained in an NPDES permit application?

No. Under 40 CFR 122.7(b), the permitting authority will deny claims of confidentiality for the name and address of any permit applicant or permittee, permit applications, permits, and effluent data.

68. Do the November 16, 1990, regulations modify the requirements of existing storm water effluent guidelines?

No. Existing storm water effluent guidelines are still applicable.

69. Which application forms are industries responsible for submitting?

- For discharges composed entirely of storm water, operators should submit Form 1 and Form 2F.
- For discharges of storm water combined with process wastewater, operators should submit Form 1, Form 2F, and Form 2C.
- For storm water discharged in combination with nonprocess wastewater, operators should submit Form 1, Form 2F, and Form 2E.
- For new sources or new discharges of storm water which will be combined with other non-storm water, operators should submit Form 1, Form 2F, and Form 2D.

70. Are Superfund sites regulated under this rule?

Yes, if the site is assigned an SIC code or fits the description of one of the categories listed in the definition of storm water discharge associated with industrial activity. Under the Superfund Amendment and Reauthorization Act (SARA) section 121(E), Superfund sites are required to "substantively comply" with all environmental regulations.

*NPL landfills must comply with permit req
but need not seek a permit*

71. Are areas used for the disposal of industrial wastewaters and sanitary wastewaters included in the definition of "associated with industrial activity"?

Yes, the definition includes sites used for process water land application that are not used for agricultural activities.

72. Do inactive industrial facilities need to apply?

Yes, if the facility is included in the definition of storm water discharge associated with industrial activity and significant materials remain on site and are exposed to storm water runoff (p.48009 of 11/16/91 Federal Register). The regulation defines significant materials at 122.26 (b)(13) as including, but not limited to, raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act; any chemical the facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

73. Can a facility apply for an individual permit after completing the group application or applying for coverage under a general permit?

This option is available, but the operator is advised to discuss the matter directly with the permitting authority.

74. If a facility is totally enclosed with no materials or activities exposed to storm water, but has a point source discharge of storm water, is a permit application required?

If the facility is described in categories 122.26(b)(14)(i-x) a permit application is required regardless of the actual exposure of materials or activities to storm water. If the facility is described in 122.26(b)(14)(xi), a permit application is required only if there is exposure of materials or activities to storm water.

75. How does a municipally owned industrial facility apply for an NPDES permit?

Such a facility must meet the same application requirements as any other industrial facility. The facility may submit an individual permit application (Forms 1 and 2F), participate in a group application, or seek coverage under an available general permit.

76. Who is required to submit Form 1?

Anyone submitting NPDES application Forms 2C, 2D, 2E, 2F, or a construction individual application is required to submit Form 1.

77. Before the October 1, 1992, individual application deadline, which forms must a facility submit to renew its NPDES permit for a storm water discharge?

Since the individual storm water application is not due until October 1, 1992, EPA is allowing such facilities to choose whether the storm water discharges are identified on a Form 2C or a Form 2F. After October 1, 1992, a facility must submit an application in accordance with 40 CFR 122.26(c) (i.e., Forms 1 and 2F).

78. Are washwaters and/or noncontact cooling waters (e.g., air conditioner condensate) included in the definition of storm water?

No. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage. Washwaters are usually considered to be process wastewater. Noncontact cooling waters are considered a nonprocess wastewater.



NPDES Storm Water Program

Question And Answer Document Volume 2



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USEFUL ACRONYMS

BAT	Best Available Technology
BCT	Best Conventional Technology
BMP	Best Management Practice
CFR	Code of Federal Regulations
CSO	Combined Sewer Overflow
CWA	Clean Water Act
CZARA	Coastal Zone Act Reauthorization Amendments
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FR	Federal Register
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRDC	Natural Resources Defense Council
OMB	Office of Management and Budget
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
RQ	"Reportable Quantity" release
SIC	Standard Industrial Classification
TSDF	Treatment, Storage or Disposal Facility (hazardous waste)
TSS	Total Suspended Solids
WQA	Water Quality Act
WRDA	Water Resources Development Act

STORM WATER QUESTIONS AND ANSWERS PART II

I. General Applicability

1. What kinds of storm water discharges are required to obtain a NPDES permit under Phase I of the storm water program?
- A. The National Pollutant Discharge Elimination System (NPDES) storm water permit application regulations, promulgated by the U.S. Environmental Protection Agency (EPA), require that the following storm water discharges apply for a NPDES permit: (1) A discharge associated with industrial activity; (2) A discharge from a large or medium municipal separate storm sewer system; or (3) A discharge which EPA or the State determines to contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. The permit application deadlines are specified in EPA's regulations.

2. What is a "storm water discharge associated with industrial activity?"

- A. The term "storm water discharge associated with industrial activity" means a storm water discharge from one of the eleven categories of industrial activity defined at 40 Code of Federal Regulations (CFR) 122.26(b)(14)(i) through (xi). Six of these categories are identified by Standard Industrial Classification (SIC) code and the other five categories provide narrative descriptions of the industrial activity. The complete definition is included in Section XIII of this document.

If any activity at a facility is covered by one of the five categories which provide narrative descriptions, storm water discharges from that area are subject to storm water permit application requirements. If the primary SIC code of the facility is identified in one of the remaining six categories, the facility is subject to the storm water permit application requirements. Note that only those facilities/activities described above having point source discharges of storm water to waters of the United States or through a municipal separate storm sewer system or other conveyance are required to submit a storm water permit application. The definition of "point source" is provided at 40 CFR 122.2. The definition is included in Section XIII of this document.

3. What are SIC codes and how can a facility find out its proper SIC code?

- A. SIC codes are four-digit industry codes that were originally created by the Office of Management and Budget (OMB) for statistical purposes. Other

organizations sometimes use these codes when classifying business establishments. To find the correct SIC code, an operator might check his or her unemployment insurance forms or contact the appropriate State unemployment services department. In addition, applicants may consult the Standard Industrial Classification Manual (SIC Manual), published by OMB in 1987. This manual is available in the resource section of most public libraries. Questions regarding assignment of particular codes can be addressed to your State permitting authority. A list of telephone numbers and addresses for State storm water contacts is provided as an attachment to this document.

4. **What SIC code should a facility use when there are multiple activities occurring at the site?**
 - A. For the purposes of the storm water program, a facility must determine its primary SIC code based on the primary activity occurring at the site. To determine the primary industrial activity, the SIC Manual recommends using the value of receipts or revenues. If such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. For case-specific determinations, contact the permitting authority for your State.

5. **How is a facility regulated when multiple activities conducted by different operators are occurring on the same site (airports, for example)?**
 - A. When multiple activities are conducted by different operators at a single location, each industrial activity is assigned its own SIC code. At an airport, for example, a passenger airline carrier will receive one SIC code, but an overnight courier located in the same hanger may receive another SIC code. Whereas the SIC codes may differ, if both are regulated industrial activities, EPA generally encourages these operators to become co-applicants (submit storm water permit application forms together) when they are located at the same site and when industrial areas/drainage basins are shared. When a permit is issued to this site (or if the operators are filing for a general permit) the co-applicants will become co-permittees and share responsibility of permit compliance.

6. If a facility's primary SIC code is not listed in the regulations, but an activity that occurs on site is described in one of the narrative categories of industrial activity, does that facility have to apply for a permit?
- A. If a facility conducts an activity on the site identified in the narrative descriptions of categories (i), (iv), (v), (vii), (ix) or (x), then the facility would be required to submit a storm water permit application for discharges from those portions of the facility where the activity occurs. Such narrative activities/facilities include: (i) activities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; (ix) sewage treatment works with a design flow of 1.0 mgd or more; and (x) construction activity disturbing five or more acres of land.
7. Do storm water discharges from non-industrial areas at an industrial facility (employee parking lots, rental car operations at an airport) have to be addressed in a NPDES permit?
- A. No. Only storm water discharges from those areas that are associated with industrial activity, as defined at 40 CFR 122.26(b)(14) must be addressed in the permit. However, if storm water runoff from a non-industrial area commingles with runoff from a regulated industrial area, the combined discharge would require permit coverage.
8. How are off-site facilities (such as distribution centers, storage facilities, vehicle maintenance shops) regulated under the storm water program?
- A. To determine the regulatory status of off-site facilities, first the operator of a facility must determine if that off-site operation can be classified according to its own SIC code. If there is no SIC code that describes the off-site facility independently, then it would assume the SIC code of the parent facility it supports. However, please note that certain off-site facilities that fall within the categories of auxiliary facilities that are provided in Section XIV of this document (or which are specifically described in the SIC code description) would, in most cases, be classified according to the parent facility they support. Such supporting establishments include central administrative offices, research and development laboratories, maintenance garages, and local trucking terminals.

EPA has determined that off-site vehicle maintenance facilities that service trucks used for local transportation of goods or for local services are generally considered supporting establishments which would not be assigned a transportation SIC code; rather, such facilities are classified according to the SIC code of the facility they support. Please refer to Section II of this document for a discussion of off-site vehicle maintenance facilities.

9. **Can authorized NPDES States be more expansive in their use of the assignment of SIC codes? For example, can they make the rule applicable to secondary activities?**
 - A. **Yes, State storm water regulations can be more expansive and cover more activities than the Federal regulations.**

10. **Are all storm water discharges to sanitary sewers exempt from storm water permitting requirements? What about discharges to combined sewer systems?**
 - A. **Any storm water discharge to a Publicly Owned Treatment Works (POTW) or to a sanitary sewer is exempt from storm water permit application requirements but is instead subject to EPA's pretreatment program under Section 037(b) of the CWA. Discharges to combined sewer systems are also exempt from NPDES permitting but are subject to pretreatment requirements.**

11. **Is a storm water permit application required for an industrial facility that has constructed a holding pond that usually does not discharge storm water, but could in the event of a large enough storm?**
 - A. **All point source discharges of storm water associated with industrial activity that discharge to waters of the U.S. or through a municipal separate storm sewer system must be permitted. Therefore, if an industrial facility does not have a storm water discharge from its holding pond during typical storm events but has a storm water discharge in the event of a large storm, that discharge should be covered under a NPDES permit. In NPDES authorized States (a list is provided in Section XII of this document), facilities should consult their permitting authority for State-specific determinations on such "potential discharges."**

12. If a facility is not engaged in industrial activity as defined under 40 CFR 122.26(b)(14)(i)-(xi), but discharges contaminated flows comprised entirely of storm water into a nearby municipal separate storm sewer system, is the facility required to obtain a storm water permit?

A. No, unless EPA or the State designates the discharge as contributing to a violation of a water quality standard or as significantly contributing pollutants to waters of the United States. However, industrial dischargers should note that large and medium municipalities (population 100,000 or more) are currently designing storm water management programs that will control contaminated storm water discharges from entering their separate storm sewer systems. Additional storm water discharges may be regulated under Phase II of the storm water program. EPA is currently in the process of developing Phase II.

13. Are activities associated with industrial activity that occur on agricultural lands exempted from storm water permitting requirements?

A. No. If a storm water discharge is associated with industrial activity as defined at 40 CFR 122.26(b)(14), it is subject to permit application requirements regardless of the location of the activity.

14. Are NPDES permits transferable from one facility owner to the next?

A. Individual NPDES permits may be transferred to a new owner or operator if the permit is modified. These procedures are described at 40 CFR 122.61. Under the general permits for storm water discharges, issued by EPA in the September 9 and September 25 Federal Register notices (57 FR 41176 and 57 FR 44412), the new operator can submit an NOI two days prior to the change but must include the facility's existing general permit number on the NOI form. Many NPDES authorized States have similar provisions in their general permits.

15. How does storm water permitting differ in States with approved State NPDES programs compared to States without NPDES State permit programs?

A. While Federal storm water regulations (i.e., the November 16, 1990, storm water permit application regulations) establish minimum requirements nationwide, State permitting authorities may impose more stringent requirements or decide to expand the scope of its program to meet State priorities. EPA Regional offices are the permitting authorities for 12 States and most Territories; the remaining 38 States and the Virgin Islands administer their own storm water programs and issue permits to regulate

municipalities and industries in their States. Regulated facilities in these States should contact the appropriate State permitting authority for guidance, application forms, general permits and other materials. Please note that some of the NPDES States do not issue permits for Federal facilities located in their States.

For regulated facilities in the 12 non-delegated States (MA, NH, ME, FL, TX, OK, LA, NM, SD, AZ, AK, ID), the Territories (except the Virgin Islands), the District Of Columbia, and for facilities located on Indian lands (in most, if not all, delegated States and in all non-delegated States), and for Federal facilities in the States of DE, CO, IA, KS, NH, NY, OH, SC, VT and WA, the storm water program is administered through EPA Regional offices. Such facilities may be eligible for coverage under the general permits issued by EPA in the September 9 and September 25 Federal Register notices (57 FR 41176 and 57 FR 44412).

II. Definition of Storm Water Discharge Associated With Industrial Activity

Category (i): Facilities subject to storm water effluent limitations guidelines, new source performance standards or toxic pollutant effluent standards under 40 CFR subchapter N.

16. What are toxic pollutant effluent standards?

- A. 40 CFR 122.26(b)(14)(i) includes facilities that are subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards. The phrase "toxic pollutant effluent standards" refers to the standards established pursuant to CWA section 307(a)(2) and codified at 40 CFR Part 129. Part 129 applies only to manufacturers of six specific pesticide products which are defined as toxic pollutants. Please note that the phrase "facilities subject to toxic pollutant effluent standards" does not refer to those industries subject to effluent limitation guidelines for toxics under 40 CFR subchapter N.

Category (iii): Mining and oil and gas operations classified as SIC codes 10-14.

17. What constitutes "contamination" at an oil and gas facility?

A. Oil and gas facilities classified as SIC code 13 are required to apply for a storm water permit if the facility has had a release of a Reportable Quantity (RQ) in storm water for which notification has been required any time since November 16, 1987, or if the discharge contributes to a violation of a water quality standard. RQs for which notification is required are defined at 40 CFR Parts 110, 117, and 302. An RQ for oil is defined at 40 CFR 110 as the amount of oil that violates applicable water quality standards or causes a film or sheen upon or a discoloration of the water surface or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the water surface or upon adjoining shorelines. For other substances, RQ levels are expressed in terms of pounds released over any 24 hour period and are listed at 40 CFR 117.3 and 40 CFR 302.4. A list of these RQ levels is available from the Storm Water Hotline at (703) 821-4823.

18. Do EPA's industrial storm water general permits apply to discharges from mine sites that are subject to storm water effluent limitations guidelines, but which are not covered by an existing NPDES permit?

A. No, storm water discharges from mine sites that are subject to storm water effluent limitation guidelines are not authorized by industrial storm water general permits issued by EPA in the September 9 and September 25 Federal Register notices (57 FR 41176 and 57 FR 44412). In States without NPDES permitting authority, the mine operators submit an individual application to address those storm water discharges, or could have participated in a group application prior to October 1, 1992 (note: any facility which did not submit an individual application prior to October 1, 1992 or participate in a timely group application missed EPA's regulatory deadline and may be subject to enforcement). However, certain authorized States may issue general permits authorizing such storm water discharges from mine sites provided that those permits contain the applicable guideline requirements.

19. Can point source discharges of contaminated ground water from mine adits and seeps at active or inactive mine sites be permitted under the storm water program?

Point source discharges of non-storm water to waters of the United States must be authorized by a NPDES permit. Point source discharges of either

contaminated ground water from a mine adit or seep that are not related to specific storm events would not be considered to be storm water. Discharges that are composed in whole or in part of non-storm water cannot be addressed solely by the permit applications for storm water (Forms 1 and 2F), and cannot be authorized by NPDES permits that only authorize discharges composed entirely of storm water. Rather, Forms 1 and 2C or 2D (and Form 2F if the discharge is mixed with storm water) must be used when applying for a NPDES permit for non-storm water.

Category (iv): Hazardous waste treatment, storage or disposal facilities.

20. If the primary SIC code of a facility is not covered under the regulations, but there is a hazardous waste treatment, storage or disposal facility (TSDF) on site, is the TSDF subject to storm water permitting requirements?
- A. Yes. If the hazardous waste TSDF is or should be operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA), regardless of the facility's primary activity, the storm water discharges from that portion of the site are subject to the narrative definition of storm water discharges associated with industrial activity under category (iv). Even if a facility's SIC code is not included in the regulations, any activity described by one of the narrative categories of "industrial activity" that is occurring on the site would be regulated under the storm water program.

Category (v): Landfills, land application sites and open dumps that receive industrial waste.

21. At what point does an inactive, closed, or capped landfill cease being an industrial activity?
- IF no exposure - not regul.*
- A. An inactive, closed or capped landfill is no longer subject to storm water permit application requirements when the permitting authority determines the land use has been altered such that there is no exposure of significant materials to storm water at the site. For example, if an impervious surface (such as a parking lot or shopping center) now covers the closed landfill, the permitting authority could determine that storm water discharges from the area are no longer associated with the previous landfill activity. These determinations must be made by the permitting authority on a case-by-case basis.

22. If construction of cells at a landfill disturbs greater than five acres of land, is coverage under EPA's construction general permits required?

A. No. EPA considers construction of new cells to be routine landfill operations that are covered by the landfill's industrial storm water general permit. However, the storm water pollution prevention plan for the landfill must incorporate best management practices (BMPs) that address sediment and erosion control. Where a new landfill is being constructed and five or more acres of land is being disturbed, such activity would need to be covered under EPA's construction general permit until the time that initial construction is completed and industrial waste is received. Please note that NPDES authorized States may address this situation differently.

Category (viii): Transportation facilities

23. If all vehicle maintenance and equipment cleaning operations occur indoors at a transportation facility, as defined at 40 CFR 122.26(b)(14)(viii), is a permit application required for discharges from the roofs of these buildings?

A. Yes. Storm water discharges from all areas that are "associated with industrial activity," described at 40 CFR 122.26(b)(14), are subject to the storm water permit application requirements. This would include discharges from roofs of buildings that are within areas associated with industrial activity. In addition, storage areas of materials used in vehicle maintenance or equipment cleaning operations and holding yards or parking lots used to store vehicles awaiting maintenance are also considered areas associated with industrial activity.

24. For a facility classified as SIC code 5171 (bulk petroleum storage), is the transfer of petroleum product from the storage tanks to the distribution truck considered "fueling", and therefore an industrial activity as defined by the regulations?

A. No. The transfer of petroleum product from the storage tanks to the tanker truck is not considered fueling and would not require a storm water permit. However, fueling of the tanker truck itself at the 5171 facility is considered to be part of routine vehicle maintenance, and storm water discharges from these areas must be covered under a storm water permit application.

25. Is a retail fueling operation that occurs at an SIC code 5171 petroleum bulk storage facility regulated?

A. No. The provisions of 40 CFR 122.26(b)(14)(viii) apply to fueling operations conducted at petroleum bulk storage facilities where the vehicles being fueled are involved with the petroleum bulk storage operation. Retail fueling of vehicles at such sites does not constitute "vehicle maintenance" (as defined in the 11/16/90 Federal Register page 48066), and a storm water permit is not required for the discharges from that area. Only those portions of the SIC code 5171 facility where vehicle maintenance operations (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) and equipment cleaning take place are required to be covered under a storm water permit application.

26. Are off-site vehicle maintenance areas required to submit permit applications for their storm water discharges?

A. As discussed in Section I of this document, to determine the regulatory status of off-site vehicle maintenance operations, the operator of a facility must first determine if that off-site operation can be classified according to its own SIC code. If there is no SIC code which describes the off-site facility independently, then it would assume the SIC code of the parent facility it supports. However, please note that off-site facilities that fall within the nine categories listed on page 17 of the SIC Manual (or which are specifically described in the SIC code description) would, in most cases, be classified according to the parent facility they support. See Section XIII of this document (page 54) for the complete list. Such supporting establishments include central administrative offices, research and development laboratories, maintenance garages, and local trucking terminals. EPA has determined that off-site vehicle maintenance facilities that primarily service trucks used for local transportation of goods or for local services are generally considered supporting establishments which do not assume a transportation SIC code; rather, such facilities are classified according to the SIC code of the facility they support. Long-distance trucking centers, on the other hand, are generally classified as SIC code 4213, and are subject to regulation under 40 CFR 122.26(b)(14)(viii).

Category (x): Construction activity

27. Who must apply for permit coverage for construction activities?

A. Under the NPDES storm water program, the operator of a regulated activity or discharge must apply for a storm water permit. EPA clarified that the

operator of a construction activity is the party or parties that either individually or taken together meet the following two criteria: (1) they have operational control over the site specifications (including the ability to make modifications in specifications); and (2) they have the day-to-day operational control of those activities at the site necessary to ensure compliance with plan requirements and permit conditions (9/9/92 Federal Register page 41190). If more than one party meets the above criteria, then each party involved must become a co-permittee with any other operator(s). For example, if the site owner has operational control over site specifications and a general contractor has day-to-day operational control of site activities, then both parties will be co-permittees.

When two or more parties meet EPA's definition of operator, each operator must submit an NOI, and either include a photocopy of the other operators' NOI(s) or the general permit number that was assigned for that project. Under EPA's storm water construction general permits, the co-permittees are expected to join in implementing a common pollution prevention plan prior to submittal of the NOI, and in the retention of all plans and reports required by the permit for a period of at least three years from the date that the site is finally stabilized.

For individual storm water discharge permits, applications must be filed 90 days prior to the commencement of construction. If a contractor has not been selected at the time of application, the owner of the project site would initially file the application and the contractor would sign on when selected. Under an individual storm water permit for construction, multiple operators would have to sign onto the permit, instead of submitting a new application. Please note that authorized NPDES States may have varying NOI and/or permit requirements and should be contacted on this issue.

28. What are the responsibilities of subcontractors at the construction site under EPA's storm water construction general permits?
- A. EPA storm water construction general permits require subcontractors to implement the measures stated in the pollution prevention plan and to certify that he/she understands the terms and conditions of the permit requirements. Under EPA's general permits, subcontractors are not required to submit NOIs.
29. What is meant by a "larger common plan of development or sale?"
- A. A "larger common plan of development or sale" is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. For example, if a

developer buys a 20-acre lot and builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures sometime in the near future, this would be considered a common plan of development or sale. If the land is parceled off or sold, and construction occurs on plots that are less than five acres by separate, independent builders, this activity still would be subject to storm water permitting requirements if the smaller plots were included on the original site plan.

30. Does construction activity encompass repaving of roads?

A. Repaving is not regulated under the storm water program unless five or more acres of underlying and/or surrounding soil is cleared, graded or excavated as part of the repaving operation.

31. Is clearing of lands for agricultural purposes regulated as construction activity under the storm water program?

A. No. Section 402(l)(1) of the 1987 Water Quality Act exempts agricultural storm water discharges from NPDES permitting requirements. The clearing of land for agricultural purposes is specifically associated with agricultural activity. However, activities occurring on agriculture lands that meet the description of any of the 11 categories of industrial activity at 40 CFR 122.26(b)(14)(i)-(xi) are subject to permit application requirements. See the response to Question 13.

32. If a construction activity that disturbs five or more acres commences on a site covered by an existing industrial storm water permit, are the storm water discharges from the construction area covered by the existing permit or is a separate permit required?

A. If the existing permit is an individual permit, then the operator must either request a modification of the existing permit to include the construction storm water discharges or apply for coverage under a separate permit that specifically addresses that construction activity. If the permittee decides to modify the existing individual permit, permit modifications must be approved prior to initiating any construction activity. If the existing permit is an EPA storm water industrial general permit, the operator should submit an NOI for coverage under EPA's storm water general permit for construction activities. States with NPDES permitting authority may have different requirements.

33. What requirements are triggered if a construction activity that disturbs less than five acres commences on a site covered by EPA's industrial storm water general permit?
- A. Sites covered by EPA's storm water industrial general permit must revise their pollution prevention plan to address all new sources of pollution and runoff from construction activities disturbing less than five acres.
34. For projects such as a 100-mile highway construction project, what location should be provided on the NOI?
- A. The midpoint of a linear construction project should be used as the site location on EPA's NOI form. For construction projects that span across more than one State, the project must meet the application requirements of each State.
35. Are long-term maintenance programs for flood control channels (such as vegetation removal) or similar roadside maintenance programs subject to permitting if five or more acres are disturbed?
- A. If grading, clearing or excavation activities disturb five or more acres of land either for an individual project or as part of a long-term maintenance plan, then the activity is subject to storm water permit application requirements.
36. For a construction activity that uses off-site "borrow pits" for excavation of fill material or sand and gravel, should the number of disturbed acres at the borrow pit be added to the number of acres at the construction site to determine the total number of disturbed acres?
- A. No, off-site borrow pits are not considered part of the on-site construction activity. If a borrow pit is specifically used for the removal of materials such as sand, gravel, and clay, the pit is considered a mine and is classified under SIC code 14. Such sites would be regulated as industrial activity as defined at 40 CFR 122.26(b)(14)(iii). However, if the borrow pit is utilized for the removal of general fill material (e.g. dirt) and disturbs five or more acres of land, the pit would be considered a construction activity as defined at 40 CFR 122.26(b)(14)(x).
37. Would building demolition constitute a land disturbing activity and require a storm water construction permit application?
- A. The definition of land disturbing activity includes but is not limited to clearing, grading and excavation. At a demolition site, disturbed areas might include where building materials, demolition equipment, or disturbed

soil are situated, which may alter the surface of the land. Therefore, demolition activities that disturb five or more acres of land would be subject to storm water construction permit application requirements.

38. What are the legal responsibilities and liabilities for construction activities disturbing less than five acres, pursuant to the Ninth Circuit U.S. Court of Appeals decision on June 4, 1992?
- A. In NRDC v. EPA, 966 F.2d 1292, the Ninth Circuit U.S. Court of Appeals remanded for further rulemaking, EPA's exemption of construction sites less than five acres which are not part of a larger common plan of development or sale. The Agency intends to undergo further rulemaking proceedings for construction sites less than five acres. Until further rulemaking is completed, permit applications for such activities need not be submitted to EPA. However, States with NPDES permitting authority may have more stringent requirements.
39. Do storm water construction general permits authorize non-storm water discharges?
- A. Under EPA's storm water construction general permits, issued on September 9, 1992, and September 25, 1992, the following non-storm water discharges are conditionally authorized (57 FR 41219) and (57 FR 44419): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles or control dust; potable water sources including waterline flushings; irrigation drainage; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents. These discharges, except for flows from fire fighting activities, must be identified in the pollution prevention plan and the plan must address the appropriate measures for controlling the identified non-storm water discharges. Other non-storm water discharges not listed above or not identified in the storm water pollution prevention plan, must be covered by a different NPDES permit.

Category (xi): Light manufacturing facilities

40. If oil drums or contained materials are exposed during loading or unloading at a category (xi) facility, are storm water discharges from this area subject to the storm water regulations?

A. The storm water regulations require category (xi) facilities to apply for a storm water permit where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. If there is a reasonable potential for leaks or spills from these drums which could be exposed to storm water, discharges from that area would be subject to storm water permitting requirements. Completely covering loading and unloading activities may eliminate exposure. Note that permitting authorities may have more stringent interpretations with respect to exposure on industrial sites and should be consulted for case-by-case determinations. For a discussion on the 9th Circuit Court of Appeals decision (June 1992) and future EPA rulemakings on category (xi) facilities, please refer to Section IX of this document.

41. Does the storage of materials under a roof at a category (xi) facility constitute exposure?

A. If materials or products at a light industrial facility are stored outside under a roof and there is no reasonable potential for wind blown rain, snow, or runoff coming into contact with the materials or product, then there may not be exposure at that area. However, if materials are stored under a structure without sides and storm water comes into contact with material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products or industrial machinery, the discharge from that area must be permitted. The permitting authority should be contacted for specific issues related to exposure.

III. Individual Permits

42. Will individual permits include requirements for storm water pollution prevention plans and monitoring?

A. EPA anticipates that many individual permits will include storm water pollution prevention plans as a means of satisfying Best Available Technology (BAT)/Best Conventional Technology (BCT) requirements established in the Clean Water Act (CWA). With regard to monitoring requirements under individual permits, such requirements will be

determined by the permit writer on a case-by-case basis. At a minimum, all facilities with storm water discharges associated with industrial activity must conduct an annual site inspection as prescribed at 40 CFR 122.44(i)(4).

43. Do permitting authorities have the option of subjecting facilities that have submitted individual storm water permit applications to general permits?
- A. Yes, permitting authorities may subject facilities that have submitted individual permit applications to general permits. Facilities that are covered by a general permit may petition the permitting authority to be covered under an individual permit by submitting an individual permit application with reasons supporting the request to the permitting authority, pursuant to 40 CFR 122.28(b)(2)(iii).
44. What are the benefits/drawbacks of pursuing an individual storm water permit over a general permit?
- A. An individual storm water permit may be advantageous, as it is designed to reflect a facility's site-specific conditions, whereas general permits are much broader in scope, particularly in terms of monitoring requirements. However, the individual permit application is generally more difficult to prepare than submitting EPA's notice of intent (NOI) to be covered under a general permit (in part because the individual permit application requires sampling and EPA's NOI does not). General permits may be advantageous because regulated facilities know, in advance of submitting their NOI, the requirements of the permit. In addition, coverage under a general permit may be automatic (depending on how the permit is written), whereas the individual permitting process takes longer.
45. When does EPA anticipate that individual permits will be issued?
- A. Issuance of individual permits may vary on a State by State basis, as permitting priorities and resources allow. The December 18, 1992, Federal Register (57 FR 60447) established October 1, 1993, as the deadline by which individual permits are to be issued. Many authorized States are already issuing individual permits.
46. Can a facility that has submitted an individual permit application obtain general permit coverage upon issuance of a general permit in its State?
- A. Yes, an eligible facility may opt for coverage under a general permit (by submitting an NOI) up until the time that the permitting authority issues such facility its individual permit. Authorized States may require a written

request for withdrawal from the individual permit application process. EPA recommends submitting such requests to the appropriate Regional office.

IV. EPA General Permits (issued on 9/9/92 and 9/25/92)

47. What is the difference between EPA's construction and industrial general permits?

A. Because the nature of construction activity varies considerably from other industrial activities, EPA developed two separate general permits--one covering storm water discharges from construction activity and one for other storm water industrial discharges. Whereas the pollution prevention plan for the construction permit focuses on sediment and erosion controls and storm water management, the pollution prevention plan for industry emphasizes general site management. Note that some authorized States have industrial general permits that authorize storm water discharges from construction activity.

EPA's general permits for storm water discharges associated with industrial activity, issued on 9/9/92 (57 FR 41236) and 9/25/92 (57 FR 44438), authorize storm water discharges from all new and existing point source discharges of storm water associated with industrial activity, as defined at 40 CFR 122.26(b)(14), to waters of the U.S., except for ineligible storm water discharges that are listed at I.B.3. (9/9/92 Federal Register page 41305) and (9/25/92 Federal Register page 44444) in EPA's general permits.

EPA's general permits for storm water discharges associated with construction activity, which were issued on 9/9/92 (57 FR 41176) and 9/25/92 (57 FR 44412), authorize storm water discharges associated with construction activity, as defined at 40 CFR 122.26(b)(14)(x), except for ineligible discharges that are listed at I.B.3 (9/9/92 Federal Register page 41217) and (9/25/92 Federal Register page 44418) in EPA's general permits.

48. What is the procedure for applying for coverage under EPA's industrial or construction general permits?

A. Dischargers of storm water associated with industrial activity located in non-NPDES States must submit a Notice of Intent (NOI) to be authorized to discharge under the general permit. The NOI form is a one-page document requesting basic information about the nature of the facility and the particular storm water discharge under consideration. Under EPA's general

permits, monitoring is not required for submittal of the NOI. States with NPDES authority may have different requirements for their NOI and should be contacted directly.

49. Will a facility automatically be covered by an EPA general permit upon submittal of an NOI or will it have to cease operations until the Agency provides notification of acceptance?

A. Permit coverage begins two days after the postmark date on the NOI, provided the storm water discharges from the facility are eligible for coverage as established by the permit conditions (see 9/9/92 Federal Register page 41305 for limitations on coverage). The permitting authority can require the submittal of an individual application at any time. However, the facility may continue to discharge under the general permit until an individual permit is issued or denied.

50. What are the deadlines for compliance with EPA's general permits?

A. Individuals who intend to obtain coverage for a storm water discharge associated with industrial activity that commenced on or before October 1, 1992, were required to submit an NOI by October 1, 1992; however, EPA is accepting late NOIs. Regulated facilities wishing to obtain coverage under the general permit that have not yet submitted an NOI should do so immediately. EPA's storm water general permits require permittees to develop and implement a storm water pollution prevention plan. Deadlines for NOI submittal and development and implementation of plans are listed in the table below.

Facilities with salt storage or facilities that were not required to report under Emergency Planning Community Right to Know (EPCRA) section 313 prior to July 1, 1992, (but must report after that date) must comply with the special requirements for section 313 facilities and salt storage (if applicable) within 3 years of the date on which the facility is required to first report under section 313. All other conditions in the permit must be met within the deadlines listed above. Plans do not have to be submitted to the Agency but must be kept on-site and made available upon request.

Type of Discharge	NOI Deadline	Pollution Prevention Plan Development Deadline	Pollution Prevention Plan Implementation Deadline
Existing industrial activities (other than construction)	October 1, 1992	April 1, 1993	October 1, 1993
Industrial activities (other than construction) that begin between October 1, 1992 and January 1, 1993	2 days prior to the start of industrial activity	Within 60 days of commencement of operations	Within 60 days of commencement of operations
Industrial activities (other than construction) that begin on or after January 1, 1993	2 days prior to the start of industrial activity	Within 60 days of commencement of operations	Upon commencement of operations
Oil and gas facilities previously not required to be permitted that have an RQ after October 1, 1992	Within 14 days of first knowledge of the release	Within 60 days of first knowledge of the release	Within 60 days of first knowledge of the release
Municipally-owned or operated industrial activities that were rejected or denied from a group application	Within 180 days of the date of rejection or denial	Within 365 days of the date of rejection or denial	Within 545 days of the date of rejection or denial
Construction sites in operation on October 1, 1992	October 1, 1992	October 1, 1992	October 1, 1992
Construction sites that begin operation after October 1, 1992	2 days prior to the start of construction	Prior to the submittal of the NOI	With the initiation of construction activities

51. Is there a fee for NOI applications?

A. EPA's general permits do not require fees at this time. However, authorized NPDES States may levy fees and should be consulted directly.

52. Where should NOIs be submitted?

A. Facilities in States and Territories where EPA is the permitting authority submit NOIs to the central processing center at the following address:

**Storm Water Notice of Intent
P.O. Box 1215
Newington, VA 22122.**

All permittees in States with NPDES authority submit the NOI to their State permitting authority except those in New York, who submit to the processing center at the above address. Note that authorized NPDES States may develop NOI forms that are different from EPA's NOI form. Under EPA's general permits, the operator of any industrial activity that discharges storm water through a municipal separate storm sewer system in a medium or large municipality must also submit a copy of the NOI to that municipality. In addition, operators of construction activities must provide a copy of all applicable NOIs for a site to the local agency approving sediment and erosion plans or storm water management plans.

53. Is an operating regulated industrial facility required to submit a separate NOI for each outfall that discharges storm water associated with industrial activity at the site?

A. Under EPA's general permits, one NOI is generally sufficient for the entire site, provided there is one operator. In this case, the pollution prevention plan must address all discharges of storm water associated with industrial activity from the site. If there are multiple operators at the site, each operator must submit an NOI. In addition, if a facility that is covered under EPA's industrial storm water general permit undertakes a construction activity disturbing more than five acres of land, then the facility must submit an NOI for those construction-related storm water discharges for coverage under EPA's construction general permit (or submit an individual permit application).

54. Will a facility receive any notification from EPA after submitting an NOI under EPA's general permit?
- A. Yes, EPA confirms the receipt of NOIs and will provide the applicant with a permit number and a summary of the guidance on preparing storm water pollution prevention plans.
55. Is an entire facility excluded from coverage under EPA's general permits if a single discharge at the site is excluded from coverage?
- A. No. Eligibility under EPA's general permits should be applied on a discharge-specific basis. Thus, a site with multiple discharges can be covered under two different permits: a general permit for some discharges and a separate NPDES permit for any discharges excluded from coverage under the general permit. NPDES States should be contacted for additional guidance on this issue.
56. Does an industrial facility operating under an EPA industrial general permit have to apply for a separate permit for all on-site construction activities that disturb more than five acres of land?
- A. Storm water discharges from construction activities that disturb five or more acres of land must be covered under a separate NPDES permit that specifically addresses storm water discharges from construction activity. EPA's industrial storm water general permits do not provide coverage for storm water discharges from regulated construction activities. Construction activities that disturb less than five acres of land do not require a storm water permit at this time. The pollution prevention plan for the industrial facility must be modified to address site changes due to that amount of construction activity.
57. Can a facility submit one NOI for similar but separately located industrial facilities which are owned by the same corporation?
- A. No. One NOI must be submitted by the operator of each individual facility that intends to obtain coverage under a general permit, regardless of common ownership.
58. Does an asphalt/concrete batch plant have to submit a new NOI each time it changes location?
- A. Under EPA's general permits, an NOI must be submitted each time the plant moves to a new site of operation. However, some authorized States may have different requirements with respect to asphalt/concrete batch

plants and, therefore, facilities in such States should contact their permitting authorities.

- 59. Who is required to monitor under the conditions of EPA's storm water general permits?**
- A. EPA established tiered monitoring requirements in its final industrial storm water general permits based on the potential to contribute pollutants to storm water (4/2/92 Federal Register page 11394). Six classes of facilities are required to monitor semiannually and report annually, ten classes of facilities are required to monitor annually and keep the data on-site, and all other classes of facilities are not required to monitor. All facilities authorized by general permits--including those facilities not otherwise required to monitor--must still conduct an annual site inspection, except for inactive mining sites where this may be impractical due to remote location and inaccessibility of sites (inspection no less than once in three years). The sixteen classes of facilities that are required to monitor are specified in EPA's industrial general permits (9/9/92 Federal Register page 41248), which are available from the Storm Water Hotline. EPA's construction storm water general permits require periodic inspections in lieu of monitoring.
- 60. If an industrial facility that is required to monitor under EPA's industrial storm water general permits does not have any exposure of materials or activities to storm water, does it still have to conduct sampling?**
- A. Under EPA's industrial storm water general permits, industrial facilities can provide a certification in lieu of monitoring results for a given outfall, that materials and activities are not presently exposed to storm water and will not be exposed during the certification period (see 9/9/92 Federal Register page 41314 for a more detailed description). This determination should be applied on outfall-by-outfall basis (e.g., permittees may elect to monitor certain outfalls while providing certification for others). The certification must be updated on an annual basis and retained in the pollution prevention plan. The six classes of facilities that are required to report monitoring results annually must submit this certification to the permitting authority in lieu of the Discharge Monitoring Report (DMR).
- 61. Within one drainage area leading to a single outfall, if a facility conducts two separate industrial activities that are subject to both semiannual and annual monitoring requirements, which set of monitoring requirements will apply?**
- A. If the discharges cannot be segregated, the combined discharge would be subject to both sets of monitoring requirements. In effect, a combined

discharge could be subject to annual monitoring requirements for certain parameters and semi-annual monitoring for others. If a facility can segregate the discharges from the different activities, separate monitoring requirements would apply to each discharge.

62. Is it possible to sample only one of several identical outfalls under the provisions of EPA's general permits?

Yes. To reduce the monitoring burden on the facility, the permit allows an operator to sample one outfall where it is substantially identical to the other outfalls. Permittees that intend to use this provision must justify and document in writing why one outfall is substantially identical to the others. Criteria for making this determination are presented in the NPDES Storm Water Sampling Guidance Document. Facilities using this provision must include the written justification in their storm water pollution prevention plan. Facilities that are subject to semiannual monitoring requirements must submit the justification of why an outfall is substantially identical to the others with the Discharge Monitoring Report. Other facilities required to monitor under the permit are not required to submit the justification unless it is requested by the permitting authority.

63. If a facility had to report under section 313 of the Emergency Planning and Community Right to Know Act (EPCRA) when its NOI was submitted but no longer uses the quantity of water priority chemicals that makes such reporting necessary, is that facility still subject to special requirements in EPA's industrial storm water general permits for facilities that handle EPCRA section 313 water priority chemicals?

- A. No. Such facilities are no longer subject to the special EPCRA requirements contained in EPA's industrial storm water general permit and should accordingly modify their pollution prevention plan to indicate the changes in industrial activity at the facility.

64. Under EPA's general permits, when and where must Discharge Monitoring Reports (DMR) be submitted for semi-annual monitoring facilities?

- A. DMRs must be submitted to the permitting authority according to the following schedule: a) certain EPCRA section 313 facilities and wood treatment facilities monitor from January to June and July to December and report no later than January 28 following the second monitoring period; b) Primary metal facilities, facilities with coal pile runoff, and battery reclaimers monitor from March to August and September to February and report no later than April 28; and c) land disposal facilities monitor from October to March and from April to September and report no later than October 28. For facilities in non-NPDES States, DMRs must be

submitted to the EPA Regional office (Section XI of this document includes storm water list of contacts for addresses). In States with approved NPDES permit programs, DMRs must be sent to the location specified in the State's general permit. The general permits in such States may also have different schedules for submitting DMRs than the one specified above.

65. Under the industrial general permit, coal-fired steam electric facilities have annual monitoring requirements for storm water discharges from coal handling sites (other than from coal pile runoff). Are access roads considered coal handling sites?

A. Coal handling sites include those areas of the facility where coal is either loaded or unloaded. Therefore, those portions of access roads where loading/unloading operations do not occur are not considered to be coal handling sites and, therefore, are not subject to annual monitoring requirements under EPA's general permits.

66. Are there specific numeric effluent limits in EPA's storm water general permits?

A. EPA's general permits establish pollutant discharge limits for total suspended solids (TSS) and pH in coal pile runoff. In most other situations, EPA's industrial storm water general permits focus on storm water management and the implementation of facility-specific pollution prevention plans; however, EPA's industrial general permits also include State-specific conditions that may include additional numeric effluent limits.

67. What is a storm water "best management practice" (BMP)?

A. A BMP (defined at 9/9/92 Federal Register page 41319) is a technique, process, activity or structure used to reduce the pollutant content of a storm water discharge. BMPs include simple, nonstructural methods such as good housekeeping, preventive maintenance and sweeping. Additionally, BMPs may include sophisticated, structural modifications such as the installation of sediment basins. The focus of EPA's general permits is on preventative BMPs which limit the release of pollutants into storm water discharges. EPA has published guidance materials to assist in the selection of appropriate BMPs in the preparation of storm water pollution prevention plans, including: *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices (PB-92-235969)* and *Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best*

Management Practices (PB-92-235951). These Manuals are available from NTIS at (703) 487-1650.

68. What should a facility do when the nature of its activities changes?
- A. When the nature of a facility's activities changes, the facility must modify the pollution prevention plan accordingly. If the facility is subject to new monitoring requirements as a result of the changes, sampling must begin at the start of the next monitoring period.
69. Is there a procedure for notifying EPA when a storm water discharge associated with industrial activity covered by EPA's general permit has been eliminated?
- A. Yes. EPA's general permits include procedures for filing a Notice of Termination (NOT) form when there is no longer a potential for storm water discharges associated with industrial activity to occur. Operators of construction activities can submit an NOT once they have finally stabilized all areas that were disturbed. For construction activity, final stabilization means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed with a density of 70% of the previously existing/background cover for unpaved areas and areas not covered by permanent structures. A copy of the NOT can be found in Federal Register notices dated September 9, 1992 (57 FR 41232 and 41341), and September 25, 1992 (57 FR 44434 and 44469).
70. If a NPDES authorized State has general permitting authority but has not yet finalized an applicable general permit, can a facility still submit an NOI and assume general permit coverage?
- A. No, a facility cannot submit an NOI to obtain coverage under a general permit until that permit has been finalized. Furthermore, a facility located in an NPDES State cannot seek coverage under one of EPA's general permits.
71. Will State general permit requirements vary and to what extent?
- A. General permit requirements for authorized NPDES States may vary considerably because these States develop and issue permits independently from EPA. However, all NPDES permits must meet minimum technical and water quality-based requirements of the Clean Water Act. Permittees in NPDES authorized States should consult with their permitting authorities regarding particular State conditions. Under EPA's storm water general permits, State-specific requirements vary

because of different water quality concerns in different States. Each of the 12 non-authorized States and Territories provided certification that EPA's general permits comply with State water quality standards, and added permit requirements where necessary to achieve compliance with those standards in the final general permits.

72. Can discharges from industrial areas at a construction site such as portable asphalt plants and/or concrete batch plants be covered under EPA's construction general permits?

A. No. EPA's construction general permits only authorize discharges from the construction area; these permits do not authorize storm water discharges from industrial activities other than construction that are located on the construction site. Portable asphalt plants and/or concrete batch plants are considered to be "industrial activity," as defined at 40 CFR 122.26(b)(14)(ii). Therefore, storm water discharges from such industrial activities must be in compliance with a general or individual storm water permit for industrial storm water discharges other than construction. At a construction site which disturbs less than 5 acres of land (and which is, therefore, not subject to storm water permit application requirements for the construction activity), the operator of the mobile asphalt or concrete plant still would be required to obtain storm water permit coverage for discharges from the plant. Please note that States with approved NPDES permit programs may allow portable asphalt plants and/or cement batch plants to be covered under the State's construction general permit.

V. Group Applications

73. How will group applicants be permitted?

A. EPA is currently developing a model permit using information from Part I and Part II group applications, and other sources. This model permit will have sections which address a particular type of industrial activity. When the model permit is completed, the permitting authority (EPA or NPDES States) then has the option to propose and issue final permits to cover group members within their state based upon the model permit.

VI. Sampling

- 74. For what parameters does a facility have to sample under the individual or group application?**
- A. Applicants are required to obtain quantitative data from samples collected during storm events from all outfalls that discharge storm water associated with industrial activity for the following parameters: (1) any pollutant limited in an effluent guideline to which the facility is subject; (2) Any pollutant listed in the facility's permit for its process wastewater [if the facility is operating under an existing NPDES permit]; (3) Oil and grease, pH, BOD5, COD, TSS, total phosphorous, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen; (4) certain toxic pollutants listed in Tables II and III of the Appendix D to 40 CFR Part 122 (also listed as Tables 2F-2 and 2F-3 in the instructions for Form 2F) that are expected to be present in the storm water.
- 75. For an individual or group application, how many aliquots (portions) of storm water are needed to obtain a flow-weighted composite?**
- A. A flow-weighted composite may be taken as a combination of a minimum of 3 sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot collection being separated by a minimum of 15 minutes. If the storm event lasts less than three hours, aliquots should be collected for as long as there is sufficient flow. Large and medium municipalities may use a different protocol with respect to time duration between collection of aliquots with approval of the permitting authority.
- 76. How does a facility measure flow if there are numerous small outfalls?**
- A. Applicants may provide either measurements or estimates of storm water flows. One possible method for estimating flow is to create a conveyance that would combine flows from many of the outfalls. Alternatively, where flows are similar, the flow at one outfall may be measured to calculate flows at the other outfalls, provided that the method of measurement is indicated to the permitting authority. EPA's *NPDES Storm Water Sampling Guidance Document* discusses several ways to estimate flows. [This manual is available from the Storm Water Hotline (703) 821-4823].
- 77. For what parameters is only a grab sample appropriate?**
- A. When collecting storm water samples, grab samples are required for the following parameters: pH, temperature, cyanide, total phenols, residual

chlorine, oil and grease, fecal coliform and fecal streptococcus. Both grab and composite samples are required for all other pollutants.

78. Do both a grab and a composite sample have to be taken from a 24-hour holding pond?
- A. No. Only a minimum of one grab sample is required to be taken for effluent from holding ponds or other impoundments with a retention period of greater than 24 hours for the representative event.
79. Can composite and grab samples be taken from separate events?
- A. Grab and composite samples for a given outfall should be taken from the same storm event to provide a basis for comparing the data. If this is impossible, information describing each storm event used for sample collection should be recorded and submitted with sampling results. However, applicants are advised that the permitting authority may request data to be collected from only one storm event.
80. Is a facility required to sample all of its outfalls during a single storm event?
- A. No. Unless otherwise specified by the permitting authority, a facility may sample outfalls during different events provided that the storms meet the criteria established in the application regulations or in the applicable permit language. Information describing each storm event used for sample collection should be recorded and submitted with sampling results.
81. If a facility has two conveyances that join and leave the site as one combined discharge, where should a sample be collected?
- A. If the discharge is composed entirely of storm water, the sampling point should be at the outfall as it leaves the property. If the discharge is a combination of process wastewater and storm water, the storm water component of the discharge should be sampled before it commingles with the process waste water discharges. If sampling at an outfall at the property boundaries is impossible because of safety reasons, inaccessibility, or a poor conveyance, sampling may be done closer to the discharge source.
82. How long a 'dry' period does a facility need before sampling?
- A. A 'dry' period needs to be at least 72 hours. More specifically, all samples must be collected from the discharge resulting from a storm event that

occurs at least 72 hours from the previously measurable (greater than 0.1 inches) storm event.

83. If two or more outfalls at a facility have identical discharges, does each outfall have to be sampled?

A. Where a facility has outfalls that discharge "substantially identical effluent," the permitting authority may allow the applicant to test only one outfall and report that the quantitative data are representative of the substantially identical outfalls. EPA's *NPDES Storm Water Sampling Guidance Document* (available from the Storm Water Hotline (703-821-4823)) provides information on how to prepare this petition, or the applicant should contact their permitting authority to determine what information is required.

84. Do analyses for storm water need to be done by a certified lab?

A. There is no Federal requirement to use a certified lab. However, certain States may require that a certified lab be used. Please note, analyses must comply with the analytical procedures set out in 40 CFR Part 136, as discussed below.

85. What analytical methods must be used for the pollutants for which sampling is required?

A. EPA-approved methods must be used where a method for a pollutant has been promulgated. 40 CFR Part 136 discusses required methods. If there is no approved method, the applicant may use any suitable method, but must provide a description of the method in its application. Additional information on general sampling issues can be obtained through the EPA's *NPDES Storm Water Sampling Guidance Document*. The manual is available from the Storm Water Hotline (703-821-4823).

VII. Municipal Permit Applications

86. Once a municipal separate storm sewer system (MS4) has submitted Part 2 of its storm water permit application, when does the term of the permit actually begin?

A. The term of the permit begins when a permit is issued. Pursuant to 40 CFR 122.26(e)(7), storm water permits for discharges from MS4s are to be issued by November 16, 1993 for large municipalities and by May 17, 1994 for medium municipalities.

87. How is EPA incorporating 1990 census data into the storm water program?
- A. EPA is planning to issue a rulemaking that will identify all municipalities who meet the definition of either a large or medium MS4 based on the results of the 1990 Census, and, therefore, who will be required to seek a NPDES permit. This rulemaking will identify permit application deadlines for these new municipalities.

88. How does EPA envision the relationship between large and medium MS4 operators and NPDES permitting authorities in terms of addressing industrial storm water discharges to MS4s?

- A. EPA envisions a partnership between NPDES permitting authorities and operators of large and medium municipal separate storm sewer systems in controlling pollutants in storm water discharges associated with industrial activity through MS4s. In addition, NPDES storm water permits provide a basis for enforcement actions directly against the owner or operator of the storm water discharge associated with industrial activity.

A second NPDES permit will be issued to the operator of the large and medium MS4. This permit will establish the responsibilities of the municipal operators in controlling pollutants from storm water associated with industrial activity which discharges through their municipal system. Under this approach, municipal operators will be able to:

- Assist EPA in identifying priority storm water discharges associated with industrial activity through their system;
- Assist EPA in reviewing and evaluating storm water pollution prevention plans that industrial facilities are required to develop; and
- Assist EPA in compliance efforts regarding storm water discharges associated with industrial activity to their municipal system.

A more complete description of this policy is provided in the August 16, 1991 Federal Register (56 FR 40973).

VIII. The Intermodal Surface Transportation Efficiency Act of 1991
(Transportation Act)

89. How did the Transportation Act affect permitting requirements for municipalities under 100,000?
- A. Storm water discharges from certain industrial activities owned or operated by municipalities with a population of less than 100,000 people were granted a moratorium from the October 1, 1992 deadline for storm water permit applications. Exceptions to this moratorium include discharges from powerplants, airports and uncontrolled sanitary landfills.
90. How does the Transportation Act impact privately owned or operated industrial activities located in municipalities under 100,000?
- A. The provisions of the Transportation Act specifically address publicly owned or operated industrial activities. Privately owned facilities that have storm water discharges associated with industrial activity, as defined at 40 CFR 122.26(b)(14), must submit a permit application regardless of the size of the population of the municipality in which they are located.
91. What is an "uncontrolled sanitary landfill?"
- A. An uncontrolled sanitary landfill (discussed at 4/2/92 Federal Register page 11410) is a landfill or open dump, whether in operation or closed, that does not satisfy the runoff/runoff requirements established pursuant to subtitle D of the Solid Waste Disposal Act. Landfills closed prior to October 9, 1991 are not subject to RCRA runoff/runoff requirements, and therefore need not submit permit applications if they are located in municipalities of less than 100,000 population.
92. If a municipally-owned sewage treatment plant is located in a municipality with a population of less than 100,000 people, but the service population is greater than 100,000 people, is the facility subject to the permitting requirements?
- A. Yes, because service populations are used in determining population for publicly-owned treatment works [POTWs] (April 2, 1992 Federal Register page 11394). Additionally, where one sewer district operates a number of POTWs, the entire service population of the district will be used to determine the applicable population classification of all the POTWs operated by the district. For example, if a district with a cumulative service population of 160,000 operates two sewage treatment plants, one of which serves 120,000 and the other which serves 40,000, both plants

will be considered to be owned or operated by a municipality with a population of 100,000 or more.

93. If a construction operation disturbing five or more acres is owned by a small municipality but operated by a private contractor, is the activity regulated?

A. No. If the construction activity is either owned or operated by a municipality with a population of less than 100,000 it would not be required to obtain a storm water permit during Phase I of the storm water program. Some States, however, may require that an application be submitted.

IX. 9th Circuit U.S. Court of Appeals Decision

94. What is the current status of light manufacturing facilities without exposure and construction activities under five acres, pursuant to the 9th Circuit Court decision?

A. The 9th Circuit Court decision remanded two "exemptions" provided in the NPDES storm water permit application regulations for light manufacturing facilities without exposure and construction activities under five acres (11/16/90 Federal Register page 48066). Both exemptions were remanded for further proceedings. In response to these two remands, the Agency intends to conduct further rulemakings on both the light manufacturing and construction activities under five acres. In the December 18, 1992, Federal Register, the Agency stated that it is not requiring permit applications from construction activity under five acres or light industry without exposure until this further rulemaking is completed.

X. Phase II of the Storm Water Program

95. What is the difference between Phase I and Phase II of the NPDES storm water program?

A. In the Water Quality Act of 1987, Congress mandated that EPA establish storm water control programs in two phases. While the first Phase I was defined on November 16, 1990, Phase II regulations were to be promulgated by October 1, 1992. However, the Water Resources Development Act (WRDA) of 1992 extended deadlines for Phase II of the storm water program as follows: 1) EPA must issue Phase II regulations by October 1, 1993; and 2) permits for Phase II sources may not be

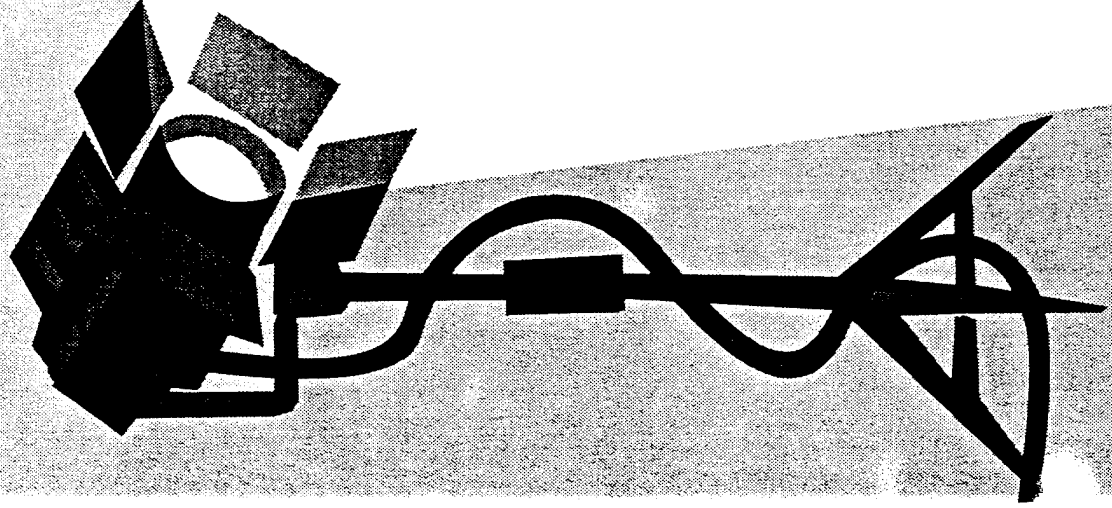
required by EPA or the State prior to October 1, 1994. EPA is currently developing regulations that will implement Phase II of the storm water program. (See Question #1 for more information on Phase I).

96. Will all storm water discharges that are not regulated under Phase I be regulated under Phase II of the storm water program (e.g., service stations, retail and wholesale businesses, parking lots, municipalities with populations of less than 100,000)?

A. Not necessarily. Statutory provisions require that EPA, in consultation with State and local officials, issue regulations that designate additional Phase II sources for regulation to protect water quality. EPA is currently developing approaches to identify and control high risk Phase II sources. EPA requested initial public comments on a variety of Phase II issues on September 9, 1992 (57 FR 41344). As part of this process, EPA is considering all sources of storm water not regulated under Phase I for potential coverage under Phase II.

97. What types of control strategies are being considered for Phase II of the storm water program?

A. Control strategies being considered include: a) designate high risk Phase II sources for coverage under Phase I; b) extend Coastal Zone Act Reauthorization Amendments (CZARA) controls to non-coastal areas; c) cover MS4 discharges from all urbanized areas under NPDES permits; d) issue NPDES permits for Phase I related urbanized areas only and use CZARA-like controls for non-urbanized areas; and e) require States to develop and implement comprehensive Phase II State storm water management programs consisting of core elements. EPA published a Federal Register notice on 9/9/92 (57 FR 41344) requesting comment on approaches for Phase II of the storm water program. The comment period closed November 9, 1992. These comments will be utilized in developing Phase II regulations.



Multi-Sector Permit Highlights

- ◆ Multi-media Compliance
 - Endangered Species Act (ESA)
 - National Historical Preservation Act (NHPA)
 - National Environmental Policy Act (NEPA)
- ◆ Army Concerns
 - Extra undue burden
 - Applicability of New Source Performance Standards to Army
 - Whether impact to endangered species applies to entire installation (10,000 - 100,000 acres in size), or only to areas with storm water discharge associated with regulated industrial activities





Multi-Sector Permit Highlights

◆ Visual Examination of Storm Water Quality

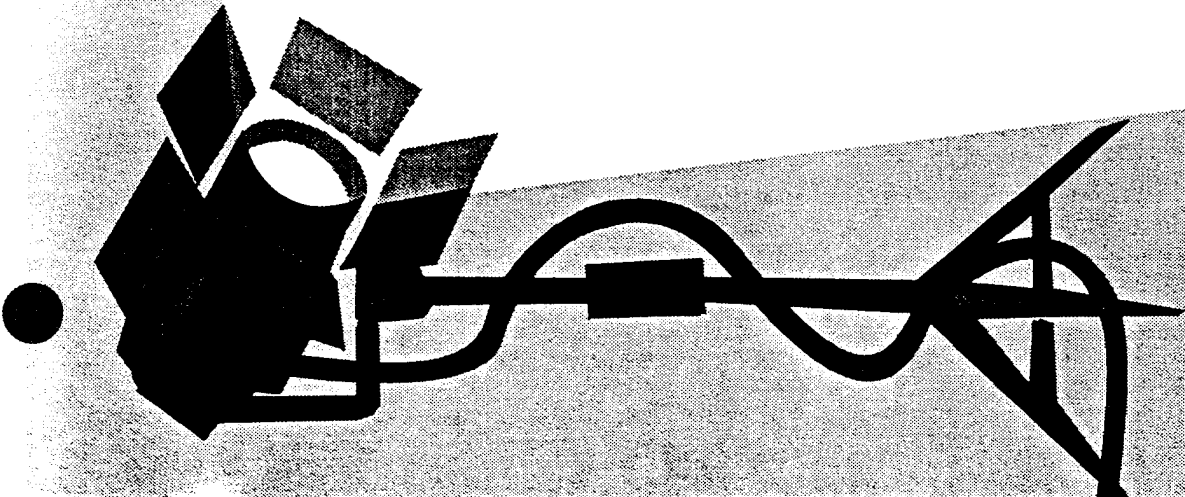
- Monthly or quarterly
- Collect samples within the first 30 minutes of discharge
- Observations of color, odor, clarity, solids, foam, oil sheen, and other obvious signs of storm water pollution
- Same individual should carry out examination of discharge for lifetime of permit
- Used to evaluate the effectiveness of the SWP3



Multi-Sector Permit Highlights

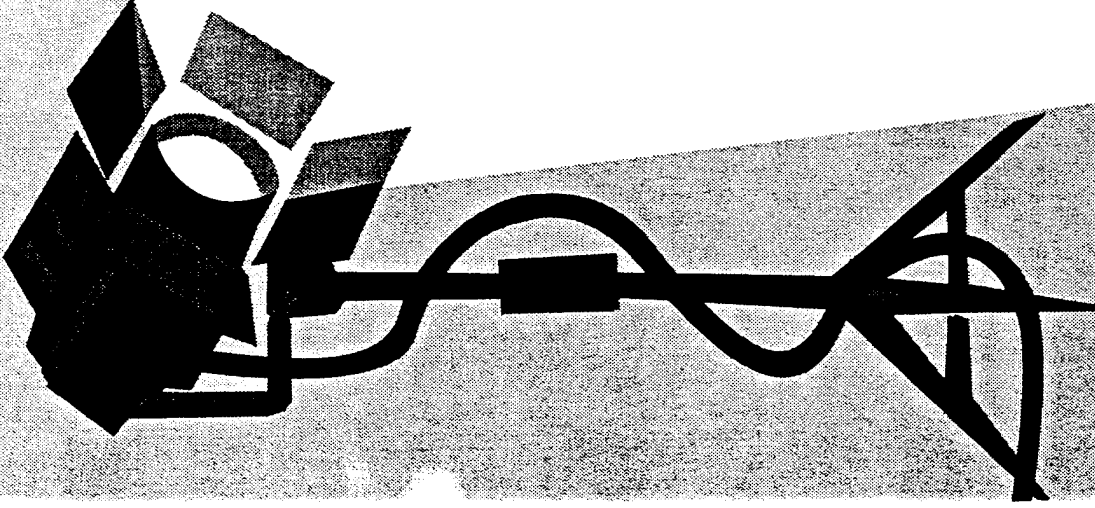
◆ Army Concerns

- Visual sampling from all outfalls within the first 30 minutes is not feasible due to the size of some installations
- Value-added of this requirement? More effective to conduct visual inspections
- Such examinations are subjective
- Investment of time and resources better applied elsewhere



Multi-Sector Permit Highlights

- ◆ Industry Specific BMPs & Training
 - Minimum requirements for good housekeeping and other non-structural BMPs
 - May list required structural measures (curbs, berms, exposure minimization practices)
"Must do" vs. "shall consider"
 - Required topics to be covered during training
- ◆ Army Concerns
 - Requirements are restrictive
 - Some requirements are inappropriate for Army facilities (industrial activities not conducted on a commercial scale, not primary function of installations)



Multi-Sector Permit Highlights

- ◆ SARA Title III, Section 313 Facilities
 - Special monitoring requirements eliminated
 - May allow individuals other than P.E.'s to certify SWP3
- ◆ Region VI TSDF Exclusion
 - EPA Region VI will not allow M-S-P coverage for TSDFs for permits issued in LA, NM, OK, and TX
- ◆ Army Concerns
 - Questions concerning threshold exceedances (whole installation-additive vs. individual sites)



Multi-Sector Permit Highlights

◆ Transportation Definition

- "The facilities covered by this section of today's proposed permit are commonly identified by SIC codes 40-43, and 5171, or *any other facility with vehicle and equipment maintenance shops or cleaning operations.*"

◆ Army Concerns

- All encompassing statement. EPA should establish minimum threshold quantities for sector applicability purposes (and limit definition to major vehicle maintenance operations/overhauls)

Multi-sector Permit: '+'s

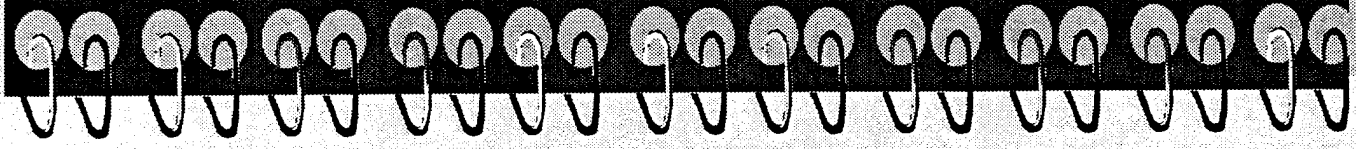
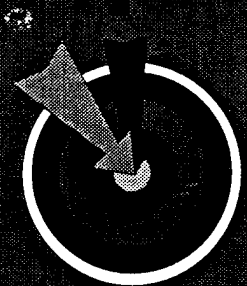
- Coverage under 1 permit as opposed to some states with many general permits
- Special monitoring requirements for SARA Title III, Section 313 facilities eliminated
- Criteria for airport monitoring based on quantity of de-icing chemicals used, rather than number of flights
- Benchmark monitoring allows for grab rather than composite sampling
- M-S-P not finalized yet (expect some changes in response to Public Notice comments)
- "Catch the Wave" (states may adopt M-S-P format upon permit renewals)

Multi-sector Permit: ''-''S

- Did not use Army submitted data
- NOI re-submission required
- Sector applicability: no cutoff limits, interim activities, training, R&D exclusions
- Benchmarks are stringent
- Multi-media approach
- Restrictive BMPs, training conditions
- Region VI TSDF exclusion
- 3 year time limit for construction projects
- Visual examinations: poor use of resources, time consuming, labor intensive
- Transportation definition is all encompassing

Army Storm Water Permit Implementation Handbook

Overview



Storm Water Handbook

- Ch 1: Environmental coordinator's role in program compliance
- Ch 2: Background regulatory information
- Ch 3: Current EPA status
- Ch 4: Current Army status
- Ch 5: Summary of standard permit conditions
- Ch 6: Permit compliance
- Ch 7: Running the program
- Ch 8: A look ahead

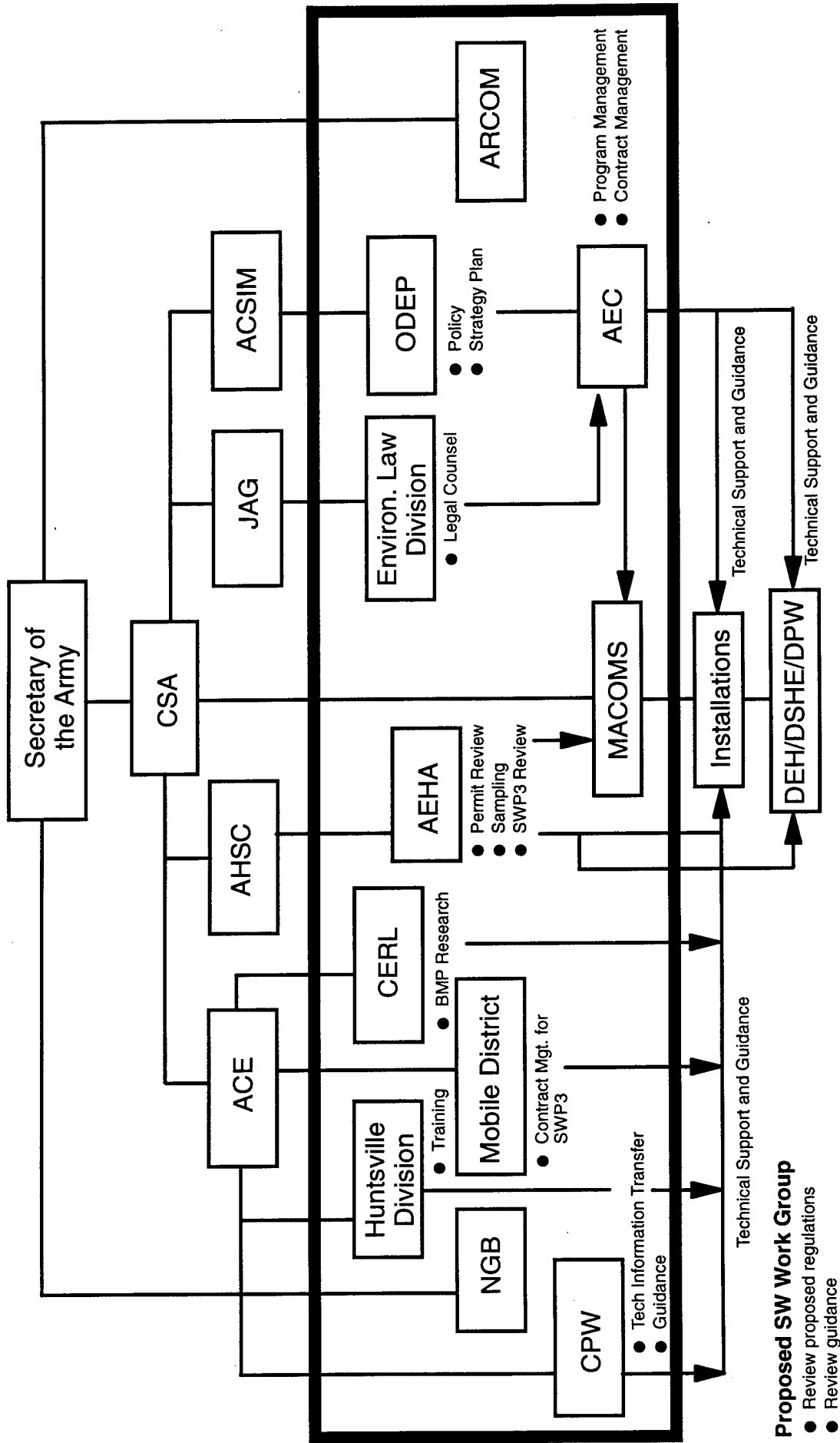
Storm Water Handbook

- Distributed to all installations w/i the next few months
- Provides information in a user-friendly format
 - 50 pages of text plus appendices
 - program support information
- Updated quarterly
- Supplemented with AEC newsletters, bulletins, information papers, etc...

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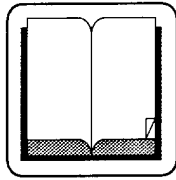
ARMY STORM WATER PROGRAM - FUNCTIONAL DIAGRAM



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Preface



This *Installation Handbook* is directed to commanders, environmental coordinators, and other personnel responsible for resolving storm water pollution problems at the installation level. It will serve as an aid in interpreting, implementing, and complying with Federal, state, and local storm water regulations associated with industrial activities. The overall objective of this handbook is to increase awareness and understanding of what is involved in complying with the conditions imposed by storm water permits.

The *Installation Handbook* is presented in 3-ring binder, tab format. Sections of this handbook will be updated as needed to reflect current events, and new or changed regulations and Army policies. This handbook will also be supplemented with monthly newsletters, bulletins, information papers, and memoranda from the Army Storm Water Steering Committee. Points of contact on the Steering Committee are provided under the section entitled "Program Support."

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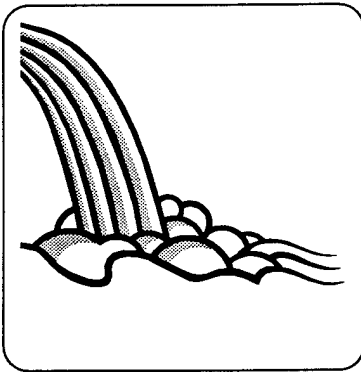
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CHAPTER 1

Overview



ROLE OF THE ENVIRONMENTAL COORDINATOR

The ultimate goal of the storm water permitting program is pollution prevention. Installations¹ must handle industrial materials in such a way that they do not mix with storm water runoff, thereby avoiding contamination that may affect the quality of water in the United States. The following subsections outline a set of actions the installation environmental coordinator must take to comply with the current storm water regulations for industrial activities. Each of those actions is discussed in detail in subsequent chapters. This guide covers only storm water associated with industrial activities; storm water associated with construction activities is not covered in this document.

ciated with industrial activities; storm water associated with construction activities is not covered in this document.

Apply for a Storm Water Permit

Either the Army Environmental Center (AEC) or someone from your installation should already have applied for a National Pollution Discharge Elimination System (NPDES) permit for storm water discharges occurring on site from regulated industrial activities. In Chapters 2, 3, and 4 of this manual, we present a detailed description of the NPDES storm water application process as well as the current status of Army applications.

Comply with the Permit

Permit compliance means taking those actions that are needed to fulfill permit conditions. The basic premise of this permitting program is to prevent contamination from the source. To do that, all permits require the development and implementation of a storm water pollution prevention plan (SWP3), and each installation will be required to prepare such a plan. That plan will describe the management methods that the installation will use to prevent source materials from coming into contact with storm water. These practices are called "best management practices" (BMPs). It will also list the persons responsible for implementing those materials management methods. Chapter 5 of this guide describes permit requirements in greater detail, and Chapter 6 addresses permit compliance issues.

¹In this handbook, the term "installations" refers to Active Army installations and Reserve Army facilities.

Although installation personnel are responsible for the SWP3, contractors will probably write the plan. AEC has contracted with the U.S. Army Corps of Engineers (USACE) Districts to produce many of the required installation plans. Depending on your District, USACE is either preparing the plan or is subcontracting the work to an architect/engineering (A/E) firm. Much information exists on SWP3s. Chapters 5 through 7 of this handbook discuss pollution prevention plans.

Basic compliance requirements include the following:

- ◆ Developing a site-specific SWP3 that does the following:
 - ▶ Identifies existing structural and nonstructural pollution prevention controls (otherwise referred to as BMPs).
 - ▶ Identifies recommended BMPs.
- ◆ Implementing the SWP3.
- ◆ Monitoring storm water discharges and sampling them if required. The permit may require that storm water runoff from certain activities be monitored periodically (see Chapters 5 and 6).
- ◆ Satisfying reporting requirements.

Chapter 7 addresses the specific details of what is involved in running a storm water program, including the roles of the principal Army participants.

Update the SWP3 and Maintain Facility Records

The SWP3 program entails considerable paperwork. Record maintenance is time consuming but necessary. Your pollution prevention program will be evaluated principally in terms of how well you conform to your own plans. Maintain the pollution prevention plan's effectiveness and accuracy by updating it annually and modifying it as required by your permit conditions. Updating plans, facility information, and personnel data; recording specific events; and preparing documentation are all part of record maintenance (refer to Chapter 5).



Avoid Receiving Notices of Violation

Notices of violation (NOVs) and other enforcement actions create a poor image for the Army in terms of not meeting its environmental objectives, as showcased in the four pillars of excellence described in *U.S. Army Environmental Strategy into the 21st Century*. As the environmental coordinator for the

installation, one of your goals is to comply with the storm water regulations, and minimize the number of storm water NOV's received. A detailed discussion on NOV's can be found in Chapter 6. Recognize that the primary reason for which you can receive an NOV under this program is the *failure to adhere to your own SWP3*.

Be Aware of Current and Future Regulations

Stay informed! You are responsible for keeping current on new regulations, and on how they may affect your installation. For example, a recent Executive Order requires Federal Facilities to comply with the Emergency Planning and Community Right to Know Act (EPCRA) of 1986 [otherwise referred to as the Superfund Amendments and Reauthorization Act (SARA) Title III]. That Executive Order affects not only the hazardous waste materials coordinator but also the storm water coordinator because of special storm water requirements for those facilities subject to SARA Title III, Section 313 requirements. Know the regulations and their implications, and you will be more successful in budget planning and allocation of limited resources. Proposed new storm water regulations will increase the responsibilities of the installation storm water coordinator. Be proactive! For a preview of what lies ahead in storm water regulations, see Chapters 3, 5, and 8.

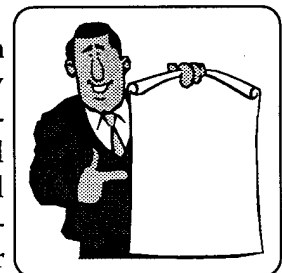
Plan Storm Water Expenses and Budget Accordingly

Your interests are best served by providing accurate and comprehensive storm water project proposals for the DB (data base) 1383 system (otherwise known as the A-106 report). Make your proposals accurate in terms of the funding needed to implement installation storm water projects (e.g., BMPs), and in terms of the priority classification for funding. Also, make those proposals comprehensive in terms of the number of projects that need funding. By staying current on future regulations, you can better forecast what projects would require DB 1383 funding over the next 8 years. Unless your projects are listed in that system, you can expect difficulty in obtaining the needed funding. The AEC will be issuing storm water DB 1383 guidance shortly.



Practice Pollution Prevention

We cannot stress enough the importance of pollution prevention. Storm water sampling data taken by the Army Environmental Hygiene Agency (AEHA) at various installations have shown that facilities with strong, well executed RCRA (Resource Conservation and Recovery Act) and SPCC (Spill Prevention Control and Countermeasures) programs had cleaner sites and therefore fewer storm water



contamination problems. Part of pollution prevention is awareness. Awareness of storm water problems may be generated through personnel training and visual reminders, such as signs and posters. Awareness can also be promoted through inspections conducted by the environmental staff and the installation command staff. Chapter 5 details basic pollution prevention measures such as BMPs.

ROLE OF THE INSTALLATION COMMANDER

The environmental coordinator's job can be made easier and more effective with the active support and cooperation of the installation commander. Experience has shown that such support promotes effective environmental management and compliance with rules and regulations by all levels of personnel. The installation commander has four roles: signatory authority, resource authority, moral authority, and leadership.

Signature Authority

Signatory requirements are clearly referenced in the NPDES permit. For a Federal agency, all applications, pollution prevention plans, reports, certifications, or other information submitted to regulators must be signed by either a principal executive officer (i.e., the installation commander) or ranking elected official. The base commander can delegate these responsibilities to a "duly authorized representative" such as the environmental coordinator. (That delegation must be in writing.) However, as the highest ranking official at the installation, the base commander still faces personal criminal liability for actions taken under this permit. That fact alone provides the commander incentive for having interest in Directorate of Engineering and Housing (DEH)/environmental activities.² Specific signatory requirements are discussed in Chapters 5 and 6.



Resource Authority

Commanders provide or allocate the resources needed by the environmental staff to implement the storm water program. Commanders should ensure that resources are *not* spent on just any "environmental" project. Monies should be spent wisely and allocated to justifiable projects with good payback and long-term benefits. No matter how hard the environmental staff try to meet regulatory requirements, they and the installation will fail if needed funds are not provided.

² At many installations, DEH may now be referred to as the Directorate of Public Works (DPW).

Moral Authority

The attitude of the commander is important since it is projected throughout the organization. The commander should provide a proactive atmosphere that supports environmental efforts, not merely because it is required but because it is the right thing to do. Such support sets a high moral tone and presents an atmosphere of excellence. By contrast, a focus on merely meeting “the regulations” presents an atmosphere of minimal performance and doing just enough to get by. A supportive commander provides incentive for all levels of personnel to respect and cooperate with the actions and directives initiated by the environmental staff. Positive support shows the environmental staff that what they do can make a difference.

Leadership

The installation commander’s responsibility is to execute the Army’s vision, as stated in the *U.S. Army Environmental Strategy Into the 21st Century*. Leadership direction and support are needed to implement improvements in all facets of Army activities and operations to achieve environmental stewardship. Environmental directives must be communicated through the chain of command and Army leaders will ensure their effective implementation.³ The strategy identifies six ways in which commanders can help execute Army environmental activities:

- ◆ Commit the chain of command
- ◆ Organize for success
- ◆ Spread the environmental ethic
- ◆ Train and educate the force
- ◆ Prioritize Army resources
- ◆ Harness market forces.



³ *U.S. Army Environmental Strategy into the 21st Century, 1992.*

CHAPTER 2

Storm Water Regulations



BACKGROUND

The 1987 Clean Water Act (CWA) amendments require the U.S. Environmental Protection Agency (EPA) to develop regulations for storm water discharges associated with industrial activity. Pursuant to Title 40, Code of Federal Regulations (CFR) Parts 122 - 124, EPA published the NPDES permit application regulations for storm water discharges final ruling in the 16 November 1990 Federal Register (Vol. 55, No. 222). Any point source discharge of "storm water associated with industrial activity" entering waters of the U.S. must be authorized by an NPDES permit, or must seek an exemption where applicable.

Some EPA-funded studies (e.g., *National Water Quality Inventory, 1988 Report to Congress, Nationwide Urban Runoff Program*) concluded that pollution from diffuse sources, such as runoff from agricultural areas, urban areas, and construction sites, is the leading cause of water quality impairment. The NPDES storm water regulations are directed toward improving water quality by reducing pollutants in storm water runoff.

The EPA is taking a four-tiered, two-phase long-term approach in its regulation of storm water. The four tiers are described in Chapter 8. EPA is currently in Phase I, which involves regulating the most serious storm water discharges – those associated with industrial activities. The phrase "storm water runoff associated with industrial activity" covers storm water runoff from the following regulated activities: manufacturing [Standard Industrial Classifications (SIC) 20-39]; transportation (SIC 40-45, 5171); mining; scrapyard, salvage; steam electric power generating plants; landfills, land-application sites; wastewater treatment facilities (design flow greater than 1 million gallons per day); and hazardous waste storage, treatment, or disposal activities. Under Phase I, EPA also regulates storm water discharges from construction activities classified as "associated with industrial activity" (see Appendix A for a list of industrial activities covered under this phase of permitting).

It is important that environmental coordinators realize regulators are currently targeting only those industries they feel have the potential to contaminate storm water runoff. This is the intent of Phase I. Regulators will eventually seek to control runoff from other sources such as agricultural lands, parking lots, auto repair facilities, and other small commercial operations (e.g., local gas stations). The prevalent misconception is that the existing regulations are all-encompassing. They may eventually include all sources, but remember, Phase I

rules cover only certain industrial activities (those mentioned in the preceding paragraph).

Standard Industrial Classification codes are numeric codes developed by the Office of Management and Budget for use in classifying establishments by the type of activity in which they are engaged. Such codes cover entire fields of economic activity, including manufacturing, agriculture, transportation, wholesale trade, retail trade, recreation, services and public administration among others. Each establishment is classified according to its primary activity. These classifications make it possible for government agencies to tabulate, analyze and publish data on any given division, major industry group, or subset of the group.

Most Army installations are classified under Industry Group 9711 – National Security. Military hospitals are classified in Services Industry Group 806. Even though the military has its own unique SIC codes, for the purposes of these storm water regulations, some of the activities conducted at many Army installations are considered equivalent to industrial sector SIC Codes 20-39, 40-45, and 5171. In general, EPA and the States require NPDES permit coverage for all Federal, state, and local government-owned facilities that discharge storm water associated with any of the industrial activities described above.



ARMY INSTALLATIONS SUBJECT TO STORM WATER REGULATIONS

Army installations conducting any regulated industrial activities from which a point source discharges storm water to surface waters of the United States or to Municipal Separate Storm Sewer Systems (MS4s) must have a storm water permit. Examples of regulated installation activities include storm water from vehicle maintenance areas, open-burning and open-detonation sites, airfields, loading and unloading areas, and hazardous waste facilities. A detailed listing of typical activities on major Army installations that may require permit coverage under storm water regulations is presented in Appendix B.

In 1991, the Army Environmental Center (formerly THAMA – Toxic and Hazardous Materials Agency) assisted the Major Army Commands (MACOMs) in identifying those installations that need a permit and in selecting permitting strategies. By now, with the exception of some Army Reserve Units and possibly some National Guard Bureaus, installations that needed to apply for a storm water permit have already done so. The Army is currently in the process of applying for permit coverage of all regulated reserve units. However, as State programs evolve, installations may elect or be required to shift from one type of permit to another, either from a Federal permit (baseline general or group) to a

state permit (general or individual), or from a state general permit to an individual permit.

FEDERAL AND STATE REGULATORS

Storm water permitting authority may or may not have been delegated to your state. The issue is one of primacy, i.e., which government (state or Federal) has primary authority over the storm water program. States are in charge of implementing the storm water regulations if they have a delegated NPDES program, general and/or individual permitting authority, and Federal facilities permitting authority. However, EPA regional offices are in charge of implementing the storm water regulations in nondelegated states. In Appendix C, we provide a list of the appropriate permitting authorities as of March 1994. *You must know the regulating authority and have a point of contact at the state or Federal level, depending upon who has program primacy.*

The availability of permitting options is a primary difference between Federal and state programs. Under the Federal program, EPA has issued two NPDES general permits: storm water associated with industrial activity (not including construction), and storm water from construction activities classified as associated with industrial activity. An installation located in a state in which the Federal government is the lead regulating authority has three permitting options: seek coverage under one or both of the EPA general permits, request individual permit coverage, or participate in the group permit process (leading to coverage under the multi-sector permit).



Options under state-delegated authority are more complicated. The states may have made available a variety of general permits based on industrial activity, as opposed to just the two general permit types issued by EPA. States such as Alabama, Kentucky, North Carolina, and Oregon have all issued a variety of general permits segregated by activity type. Alabama, for example, has 12 industry-specific general permits and requires a facility to seek coverage under every applicable general permit. In this situation, a facility may end up dealing with numerous general permits. Kentucky, on the other hand, requires you to choose the most applicable one of the eight general permits available. Some States will not recognize the group permit process, and you must seek other alternatives. The implications of being involved in the group permit process are complicated and are discussed further in the next chapter. Appendix D lists the permitting options available in each state. *Individual permit coverage is always an option regardless of the regulating authority.*

THE PERMITTING PROCESS

Installations requiring a permit under the storm water regulations must file an application and pay any applicable application fee. Provided below is a summary of the various application processes and types of NPDES storm water permits available. Storm water permits are usually good for 5 years (permit duration), after which the permit must be renewed.

Application Procedures



An overview of the three permit application processes (Individual, General, Group) is shown in Figure 2-1.

INDIVIDUAL

The individual application track is straightforward (Figure 2-1, left). Forms 1 and 2F are filed with the permitting authority. The regulators will write a draft permit and initiate public notice procedures.

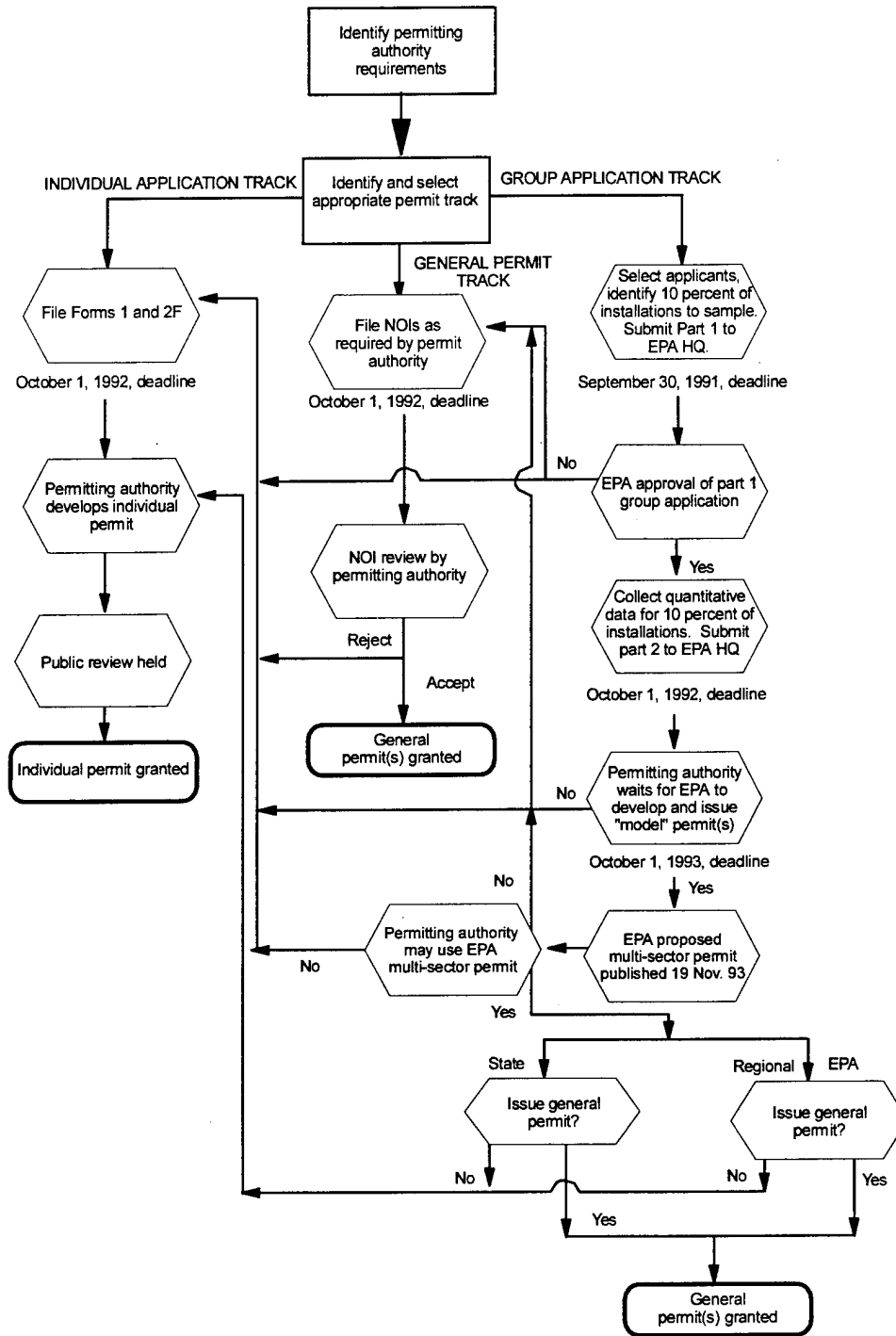
After the permit is finalized, it will be issued to your installation.

GENERAL

Figure 2-1, center, shows the track for obtaining a general permit from NPDES states or an EPA general permit from non-NPDES states. Under that track, you file an EPA notice of intent (NOI) or state equivalent as required by your permitting authority. The regulator will review your application and if it is accepted, your installation will be allowed to discharge under a general permit. Under the general permit track, all permit conditions are known since they are set and have been published in the state/Federal register. General permits differ from individual permits because they have already been drafted and reviewed through the public notice process. If the general permit application is rejected, you will be required to file an individual application. In most cases, the general permit is effective 48 hours after an NOI is filed unless the regulatory agency objects to your application.

GROUP

The group application track (Figure 2-1, right) is the most complicated of the three paths. The idea was that similar facilities would file together and create a "representative group." As part of a group, application sampling is minimized to 10 percent of the total applicants of that group. EPA must approve all group applicants (Part I of application) and receive sampling data for 10 percent of the members (Part II of application). The deadline for EPA group application approval was 1 October 1992. Any groups approved by EPA would then wait for



Note: Dates listed are regulatory deadlines.

Figure 2-1.
Storm Water Permit Application Flowchart

EPA to develop its model permits. The original intent was that EPA would develop model permits specifically tailored to each group by 1 October 1993. The models would be forwarded for review to state and regional authorities. At those levels, the model can be used in whatever form the authorities wish. It can be tailored and issued to installations in the state or region as a general permit or it can be used as the basis for drafting individual permits.

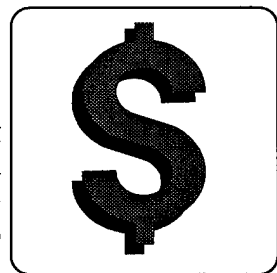
Group applicants are currently in a state of limbo. The 1 October 1993 deadline for which all facilities were required to have a permit has passed without EPA distributing the model permits. Technically, all group participants are now operating without a storm water permit. As time elapses, many states will no longer recognize or accept the EPA-approved groups. States will then force group applicants to choose an alternative permitting track.



On 19 November 1993, EPA's proposed *multi-sector* permit was published in the Federal Register (Vol. 58, No. 222). Because of the overwhelming number of group applicants, EPA altered its group approach. As opposed to issuing model group permits, EPA issued one multi-sector permit that addressed 29 industrial sectors. EPA believed that all the group applicants would be covered in at least one, and possibly many, of the 29 industrial sectors. The public notice period ended on 17 February 1994. All interested parties, including the Department of Defense, are now awaiting the final version of this multi-sector permit. A summary of the proposed multi-sector permit requirements and current Army status is provided in the following chapter.

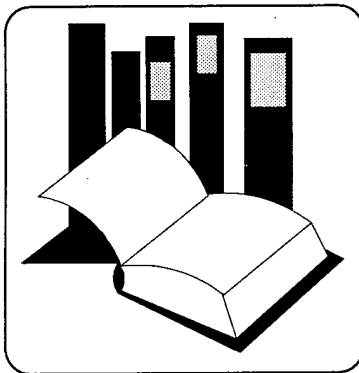
PERMIT FEES

In many cases, a fee may be associated with obtaining a permit. EPA-regulated states usually do not charge an application fee, while state run programs may charge anywhere from \$100 to \$500 for a general permit and \$500 to \$1,000 for an individual permit. In addition to the initial permit fee, your state may require an annual maintenance fee. Check with your permitting authority.



PERMIT RENEWALS

A permit is good from the effective date of the permit until the permit expiration date, which is usually a 5-year term. There is no guarantee that permit conditions will remain the same as they are today. With EPA's tiered permitting strategy, expect to see major changes in your permit upon permit renewal.



NPDES STORM WATER PERMITS

The application process consists of three routes or tracks – individual, general and group – leading to two types of permits: the individual permit and the general permit. Chapter 4 describes the Army's current status in the permit process.

Filing an individual application (EPA Forms 1 and 2F or state equivalent), will result in the receipt of an individual permit (typically after negotiations with your permitting authority).

Individual permits are tailored to the facility, generally include detailed monitoring requirements, and are usually more expensive to implement. Requirements found in an individual permit can usually be negotiated with the regulators during the draft/public notice period. When an individual permit is issued, you will receive a copy of the permit, with its effective date and expiration date listed on the first page.

Filing a general application (NOI form or state equivalent) will result in the receipt of a general permit or, in some cases, an individual permit. Regulators may decide that general permits are not appropriate in your situation and may issue you an individual permit instead. See Appendix E for a look at EPA's general permit.

General permits are attractive because they are typically generic, usually less stringent, and less expensive to implement than individual permits. Requirements found in a general permit have already been established and are typically not negotiable. You may not "receive" a copy of the general permit; many states publish the general permit in the state/Federal registers and send you a letter telling you to abide by the conditions of that permit.

Filing as part of a "group" application (EPA Forms 1 and 2F) will result in the receipt of a general or an individual permit tailored to your group. EPA allowed facilities with similar operations and discharges to file a group application. EPA used information from those groups to develop a *multi-sector* permit. The multi-sector permit is really a type of general permit specifically written/tailored to the industry information collected from the group applications. This permitting strategy has become more complicated than EPA had anticipated. Many states with primacy have chosen not to recognize the multi-sector permit, and require facilities to seek a state general or individual permit. The remaining states with primacy may use the EPA multi-sector permit in some form when issuing a facility its storm water permit. In EPA lead states, facilities will still have the option of choosing the multi-sector permit, or filing for coverage under the EPA baseline general permit. The multi-sector permit is discussed in detail in the following chapter. A copy of EPA's permit application Forms 1 and 2F, and its NOI is provided in Appendix F.

Even if an installation elects to accept regulation under a general permit or petitions for inclusion in a group permit, the regulatory agency may deny the

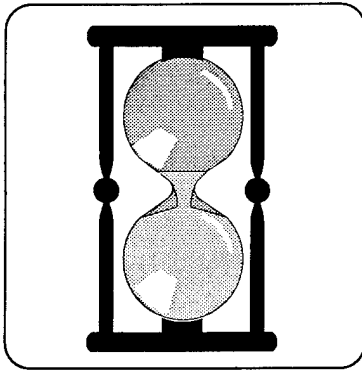
application. If the facility poses a significant risk of polluting U.S. waters because of unique factors, an individual permit may be required. Such a decision by the regulatory agency could occur at any point in the permitting process. A time period is usually granted for an applicant to pursue the individual permit.

No matter what application route is chosen, facilities with an existing NPDES permit may face yet another scenario. In some cases, regulators may include the storm water discharge requirements in the facility's existing NPDES permit rather than issue the facility a separate storm water permit. In this situation the regulators will either modify your existing NPDES permit (issue a permit modification) immediately, or may elect to wait until your existing NPDES permit expires and then add storm water requirements to the renewal permit (or variations on this theme).

In summary, two factors cause difficulty in determining which permit a facility may receive: the authority of the regulators (to deny an application/permit path), and the identity of the entity that holds primacy (state or federal government). Much is based on the discretion of the regulators.

CHAPTER 3

EPA Status



THE GENERAL PERMIT

The EPA general permit for storm water discharges associated with industrial activity was published in the 9 September 1992 Federal Register (Vol. 57, No. 175) and the 25 September 1992 Federal Register (Vol. 57, No. 187). The EPA general permit will expire on 1 October 1997. To remain covered under the general permit after that date, permittees must submit a new NOI between 1 August 1997 and 29 September 1997.

1 OCTOBER 1993 DEADLINE

Under a legal settlement with the Natural Resources Defense Council, EPA was to have issued permits to all industrial storm water dischargers by 1 October 1993. However, the EPA did not publish a final "multi-sector" permit before that deadline. Legally, facilities which are part of the group application operating after 1 October 1993 without a permit are not in compliance with the regulations.

THE MULTI-SECTOR PERMIT

A New Approach

The EPA received well over 700 group applications, with 44,000 industrial facilities participating in the group application process. On the basis of information from those groups (sampling data, activity descriptions, materials exposed to storm water, best management practices), EPA developed an industry-specific multi-sector general permit. To develop this permit, the EPA reduced all group applicants into 29 industrial sectors based on similarity of activities. It then incorporated the permit requirements for all 29 sectors to a single storm water permit. Refer to the EPA released press package (Appendix G) for a list of the 29 industrial sectors; in that press package, an asterisk identifies those sectors that may be relevant to an Army installation.



Public notice of the 800-page permit and 900-page fact sheet was published in the 19 November 1993 Federal Register (Vol. 58, No. 222). A 90-day comment period was granted, after which the permit would be finalized and issued. The EPA expects to finalize its multi-sector permit in the fall of 1994.

What You Need To Know

WHO WILL USE THE PERMIT?

The EPA expects the 12 non-NPDES states, 6 territories, 5 states without Federal facilities permitting authority, and certain Federal Indian Reservations where EPA is the permitting authority to use the permit. Also, this permit may or may not be used by the other NPDES states. Appendix G presents a list of those states that may use the multi-sector permit.

HOW DO I SEEK COVERAGE?

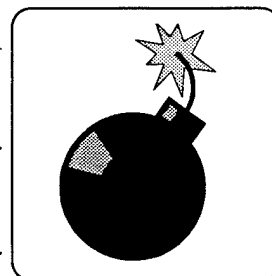
After the final multi-sector permit is issued, both group applicants and non-group applicants who wish to gain coverage under this permit must submit an NOI. Thus, even if your facility did not participate in the group application process, you may still seek coverage under this permit (EPA lead states).

IF MY FACILITY IS PART OF A GROUP APPLICATION, WHY MUST I FILE AGAIN?

The EPA is requesting the submission of an NOI to satisfy legal requirements. Because the conditions of the multi-sector permit are different from the EPA general permit conditions, a new NOI indicates that you will abide by the new permit. Multi-sector permit applicants must sign the application statement swearing that they have read and understood all permit conditions. That is an EPA legal issue.

WHAT DEADLINES SHOULD I BE AWARE OF?

- ◆ 90 days to submit an NOI after a permit is issued (48 hours after submission of a complete NOI, a facility has permit coverage)
- ◆ 90 days to transfer into the multi-sector permit from the general permit
- ◆ 270 days to develop and implement a pollution prevention plan after permit issuance
- ◆ No longer than 3 years after permit issuance to implement controls that require construction

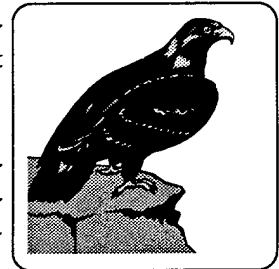


HIGHLIGHTS OF THE PROPOSED MULTI-SECTOR PERMIT

For a more detailed summary of the proposed multi-sector permit, refer to the EPA press package in Appendix G. An actual copy of the multi-sector permit can be obtained from AEC.

Multimedia Compliance

The proposed multi-sector permit addresses multimedia compliance. EPA has included on the NOI a statement that requires operators to certify that they are in compliance with the applicable requirements of the Endangered Species Act (ESA), National Historic Preservation Act (NHPA), and National Environmental Policy Act (NEPA).



Discharges that have an impact on a listed endangered/threatened species but do not have an ESA Section 10(a) incidental take permit are not eligible for coverage.

Discharges that disturb a site listed in, or eligible for listing in, the National Historic Register are not eligible for coverage.

Discharges that are subject to New Source Performance Standards (NSPS), and are therefore subject to NEPA, that do not have a Finding of No Significant Impact (FONSI) or a completed Environmental Impact Statement (EIS) are not eligible for coverage.

Collocation Issues

Storm water discharges from collocated industrial activities are authorized by the proposed multi-sector permit, provided that the industrial facility complies with the additive pollution prevention plan and monitoring requirements applicable to the collocated industrial activities.

Industry-Specific Best Management Practices

The pollution prevention plan is still the basic storm water control mechanism in the permit. The main difference between the EPA baseline general permit and the proposed multi-sector permit is that the multi-sector permit addresses industry-specific BMPs. Those BMPs can either be baseline BMPs or advanced/structural BMPs. The permit language is written such that certain BMPs are required and *must* be implemented, while others need only be *considered*.

Where construction is necessary to implement measures required by the plan, the plan must contain a schedule that completes construction no later than 3 years after permit finalization.

Benchmark Monitoring

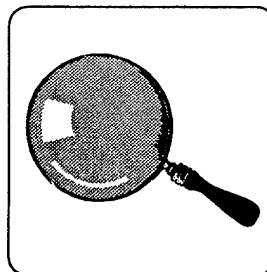
Of the 29 industrial sectors, 17 "high-priority" sectors will be required to conduct quarterly storm water grab sampling in Year 2 and possibly Year 4 of the five-year permit (there are no composite sampling requirements). Based on a statistical analysis of group application data, EPA identified pollutants of concern for each industrial sector and established benchmark values for each of them. The primary sources of the benchmark values are National Urban Runoff Program (NURP) median values for conventional pollutants and Gold Book Values for other pollutants. EPA proposes to require monitoring for priority industrial activities only. The EPA has selected five pollutants with median concentrations above benchmark levels as one criterion for selection as a priority sector.



The objective of EPA's benchmark monitoring is to show, based on Year 2 sampling data, whether pollution prevention measures implemented in the first year are adequate. Refer to Appendix G for a list of those sectors that require monitoring. Facilities whose storm water runoff contains pollutant levels that exceed benchmark levels set forth in the multi-sector permit must improve their BMPs and resample during the fourth year of the permit. Facilities for which storm water sample runoff falls below benchmark levels are exempt from monitoring during the fourth year. All monitoring results must be submitted to the Regional EPA office.

Visual Inspections

All facilities covered under the proposed multi-sector permit will have to conduct visual inspections of storm water discharges on a monthly or quarterly basis depending on the industrial sector. Visual inspection consists of examining a grab sample from each discharge point within the first 30 minutes of the start of runoff. The examiner must visually inspect the quality of the storm water by observing color, odor, clarity, floating solids, settled solids, suspended solids, oil sheen, and other obvious indicators of storm water pollution. EPA expects the visual examination to be performed by members of the pollution prevention team.



SARA Title III, Section 313 Facilities

Unlike EPA's baseline general permit, the proposed multi-sector permit does not contain special monitoring requirements for facilities subject to the Toxic Release Inventory (TRI) reporting requirements under Section 313 of the EPCRA (Emergency Planning and Community Right to Know Act). After reviewing the group application data, EPA determined that monitoring requirements were more appropriately based upon the industrial activity or significant material exposed. However, as in the baseline general permit, EPA has retained the special pollution prevention plan requirements for Section 313 facilities. Chapter 5 presents a discussion of SARA Title III, Section 313 requirements in EPA's baseline general permit.

CHAPTER 4

Army Status



PERMIT APPLICATION

An application process has already been chosen for your facility. The MACOMs, with AEC assistance, are currently handling the Army's storm water program. If you are an Army Materiel Command (AMC) facility, AMC HQ has already delegated the storm water program down to the installation level [through the major subordinate commands (MSCs)]. That means AMC installations have chosen their own permitting approaches. The Army National Guard is also handling its own installations.

The permit process for other MACOMs, including Reserve facilities, has been handled by AEC.

The Army is involved in two group applications, one for the Active Army (EPA Group 382) and the other for Reserve facilities (EPA Group 383). Most Forces Command (FORSCOM), Training and Doctrine Command (TRADOC), U.S. Military Academy (USMA), Health Services Command (HSC), Information Systems Center (ISC), and Military District of Washington (MDW) installations are participating in one of the Army group applications. In general, AMC installations have avoided the group application track because their operations are unique; they either obtained general or individual permits.

Currently, 31 installations are included in the Active Army group application, and 89 in the Reserve group application (Appendix H). These numbers will decrease with time for various reasons:

- ◆ Some states do not recognize EPA's group process (for that reason alone, many Army participants have had to obtain general or individual permits from the states in which they are located).
- ◆ Certain states conditionally accept the EPA group.
- ◆ The Army has voluntarily removed installations from the EPA group because in many states, general permits are easier to comply with.
- ◆ A few NPDES states have not issued final general permits or have no general permitting authority. When that situation changes, Army installations may wish to apply for the state's general permit.

- ◆ Some installations may not require permits, given site-specific conditions or decision by the permitting authority.

All other installations not participating in a group either intend to comply with a general permit or are seeking an individual permit as required by state-specific conditions. AMC installations¹ have had to seek individual permits because AMC tends to conduct major industrial activities at those installations, and thus, they would not be qualified for group permitting. *Be aware of the kind of permit your facility is seeking.*

The Army application selection process is subject to errors and omissions, especially in the case of Reserve installations. Check to see what kind of permit, if any, your installation has applied for and whether that permit is appropriate for your installation. If it turns out that your installation has *not* applied for a permit, either directly or through your MACOM, then you need to check to ensure that no permit is required. Should you need assistance, refer to the contact names provided at the end of this chapter.

Now that you are involved in a permit application process, what do you do next? The next two subsections discuss where we go from here.

Individual Route

If your facility is seeking an individual permit, actively participate in preparing it. You have two ways to do so:

- ◆ Make your staff available to the permit writers at your regulatory authority. You know the facility better than the regulators and you may have some information or suggestions that will be helpful to them.
- ◆ The public notice period is an excellent opportunity to express your views on the draft permit before it becomes finalized. Regulators are required to respond in writing to your expressed concerns. You can use that requirement as a tool to negotiate a more favorable permit. Once the draft is written, your influence over the process is greatly diminished.



After the permit is issued, read it carefully. The “effective date of the permit” and the “expiration date of the permit” can be found on the front page of your permit. You must comply with the permit beginning on the date that it is

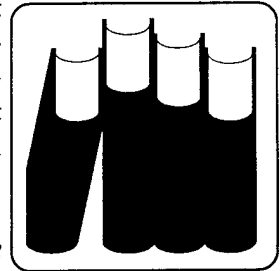
¹Fort Monmouth, New Jersey, was the only AMC installation that participated in the group application process. New Jersey conditionally accepted EPA’s group process, and established a deadline of October 1, 1993, after which it would no longer recognize the group process. Because of this deadline, Fort Monmouth was forced out of the group process.

issued to the facility (usually the effective date of the permit). Chapter 5 presents an overview of basic permit conditions.

General Route

If your facility is seeking applicable Federal or state general permits, you will face one of two situations:

- ◆ *General permits are final and in effect* – In this situation, no permit negotiation is involved because the general permits have already gone through public notice procedures. The EPA general permit and most NPDES state general permits fall in this category. After an NOI has been filed, your installation must comply with all permit terms immediately (e.g., you must meet specified timelines for SWP3 development and implementation).
- ◆ *General permits are in draft stage and have yet to be finalized* – If you are faced with this situation, try to participate during the public comment period (Wisconsin should be the only state in this stage). Once the permit is finalized, immediately file an NOI (unless the previous NOI suffices) and comply with the permit provisions. Check the effective permit date listed on the front page.



Group Route

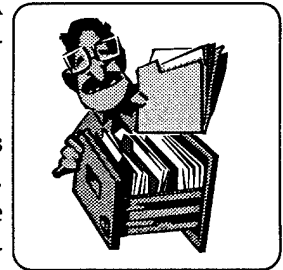
As of 1 May 1994, group applicants are awaiting EPA's response to comments received during the proposed multi-sector permit public notice period, which ended 17 February 1994. On the basis of comments submitted to EPA by industry groups, environmental groups, the Department of Defense (DoD) and other interested parties, EPA will revise its draft permit and finalize it sometime this year.



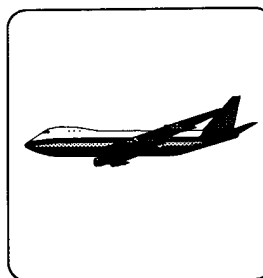
DoD RESPONSE TO THE MULTI-SECTOR PERMIT

During the public notice period (17 November 1993 through 17 February 1994), representatives from the Army, Navy, and Air Force met with representatives from the Office of the Secretary of Defense to critique the multi-sector permit. In the initial meeting they decided that only one set of comments, representing all DoD facilities, would be submitted to EPA. A copy of DoD comments on EPA's multi-sector permit is provided as Appendix I. A summary of the main points is highlighted here.

- ◆ *Questions concerning sector applicability:* Because SIC codes are used for industrial sector coverage, installations have difficulty determining applicability. The permit addressed collocation of industrial activities but did not address situations in which more than one sector affects a particular activity (e.g., Defense Reutilization and Marketing Office yards may be regulated under three different sectors: hazardous waste treatment, storage or disposal; auto salvage yards; and scrap and recycling facilities).
- ◆ *Use of threshold limits:* DoD requested EPA to consider providing quantity-based threshold limits for applicability of secondary sectors (activities that are not primary functions of the facility). Installations with extremely small operations (in terms of quantity and duration) are potential candidates for coverage under many sectors.
- ◆ *Multimedia approach:* DoD sees the multimedia approach as placing additional burdens on an installation's limited resources and personnel.
- ◆ *Sources used to determine benchmark levels:* DoD believes that the benchmark values are not valid because site specific characteristics such as background contamination levels, receiving water characteristics, and natural variability make any attempt to establish national benchmark values inappropriate. Benchmarks are too stringent. DoD requested that EPA either discount background levels of pollutants from benchmark values, or set the values to drinking water standards or to background levels for a specific watershed.
- ◆ *Undue burden of records retention requirements:* EPA should reduce burdensome records retention requirements.
- ◆ *Inappropriateness of visual examinations:* DoD questions the usefulness of conducting such an examination. Many installations are extremely large and may have 100 or more regulated storm water outfalls. It is impractical to assume that the pollution prevention team can visually sample from all such outfalls within the first 30 minutes of storm water runoff. DoD recommended the use of visual inspections rather than visual sampling as a method for determining the effectiveness of current pollution prevention measures.
- ◆ *Clarification of transportation facilities and vehicle maintenance activities:* DoD does not believe that EPA intends to regulate all gas stations and motor pools that have maintenance or cleaning operations, however small. DoD asked EPA to consider limiting the definition of vehicle maintenance operations to motor or transmission overhauls and to establish a minimum threshold quantity of 7 vehicles per week for sector applicability purposes.



- ◆ *Changes to sector applicability for air transport facilities:* DoD agrees with the threshold limit approach, which bases sector applicability on quantity of de-icing materials used per year, as opposed to number of flight operations conducted per year.



The Department of the Army (DA) is concerned about the overall attractiveness of the multi-sector permit. Since EPA may modify the proposed permit in response to the comments received, the finalized permit may look somewhat different than the draft version. Installations that are part of a group application must decide about permit coverage in the near future; either they go with the multi-sector permit or switch to the state/Federal general permit. As EPA finalizes its multi-sector permit, AEC will provide installations with additional information on the advantages and disadvantages of each permit type. AEC's objective is to help installations make an informed decision on the type of permit coverage they should seek.

WHAT NEXT?

What happens after EPA finalizes the multi-sector permit? That depends upon the state in which you are located. The following subsections break down the discussion of the group approach by the different permitting authorities: EPA Lead applies only to those states in which the regional EPA has Federal facilities-permitting authority; State Lead applies only to those NPDES states with Federal facility-permitting authority (refer to Appendix C for state status).

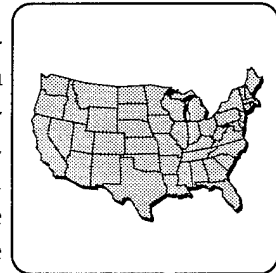


EPA Lead

Once EPA issues the multi-sector permit, the regional EPA offices will also issue it to all interested parties within their region. Note that the multi-sector permit is one type of general permit and EPA's baseline general permit is another. As discussed in the previous chapter, once the multi-sector permit is finalized, an NOI must be submitted for permit coverage within the time frame specified. Regional EPA offices have the authority to tailor the multi-sector permit to reflect site-specific conditions within that region, and within a particular state. For example, region-specific conditions in the proposed permit state that Region VI does not anticipate allowing multi-sector permit coverage for hazardous waste treatment storage or disposal facilities. Those facilities would need to seek alternative coverage.

State Lead

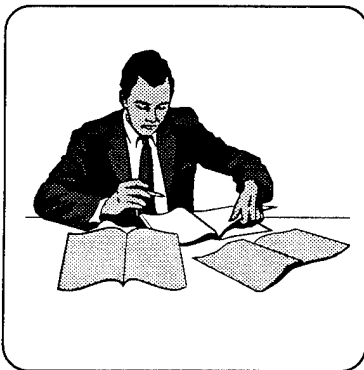
The NPDES states are not required to issue the multi-sector permit to your installation even if you have chosen that route. An NPDES state may choose to issue an individual or state general permit to your facility. If it does, the state may request more specific information from you. To provide that information, you may have to sample storm water runoff or supply detailed coordinates of the discharge points.



If your permitting authority changes from regional EPA to state, you will probably have to switch from the Federal general permit to a state general permit.

Under Section 401 of the CWA, states have a right to include water quality criteria in the multi-sector permit, regardless of who the permitting authority is. Water bodies in the United States are classified by designated uses (e.g., potable waters, recreational waters) and must meet certain pollutant limitations. Federal permits need a certification by the state that the storm water discharges will be in compliance with Sections 301-307 of the Federal Water Pollution Control Act. This may imply more stringent requirements for you to meet.

You should maintain an open line of communication with your regulatory authority. *Be prepared to provide any information needed by the state or regional EPA.* To find out what type of information is needed, call the point of contact for your state (Appendix C). Inquire specifically as to what will be required of you, and plan ahead for what you will do if the multi-sector permit option is rejected by your state.



POLLUTION PREVENTION PLAN DEVELOPMENT

The AEC contracted with the U.S. Army Corps of Engineers (USACE) to assist in the development of storm water pollution prevention plans (SWP3s) for select installations. Through this MACOM/installation funded contract, Army facilities could obtain a pollution prevention plan. This contract allowed Corps Districts to hire A/E firms in order to develop the plans. In some instances, the Corp Districts developed the plan themselves. [The U.S. Geological Survey (USGS) also developed some plans.] The first set of plans was developed for 20 installations; draft versions were due on 27 September 93, and finalized by 14 January 94. Draft versions for the second set of plans involving 177 installations (excluding those in New York and New Jersey) were due 18 January 94, with finalization of plans expected by 10 May 94. A total

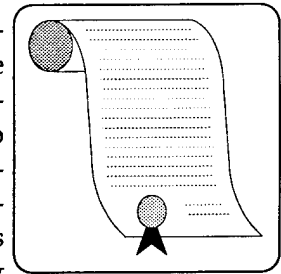
of 143 Reserve and 54 Active Army installation SWP3s were covered in this contract.

In the near future, AEC will award another contract to USACE to prepare the first annual SWP3 update. Facilities will be notified when that contract is available.

ENVIRONMENTAL STAFF TRAINING

Training During FY93

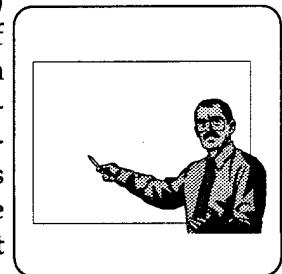
During FY93, AEC provided a series of five 3-day intensive storm water training seminars. The target audience for the training program was installation storm water coordinators, Corps contractors and the A/E firms hired to write the SWP3s. The seminar was hosted by Environmental Science & Engineering, Inc. (ES&E). Speakers included representatives from ES&E, USGS, and Logistics Management Institute (LMI). The introductory training was basically an overview of the topics covered in this manual, with detailed Army-specific discussions on SWP3s and BMPs; it also included a field trip to a nearby Army installation. Chapter 6 discusses training in greater detail.



Training During FY94

Five additional rounds of storm water training will be provided in FY94. Two of the five training sessions will be geared towards representatives from Army Reserve installations, while the other three will be for Active Army personnel. The AEC's goal is to have at least one representative from each installation at an introductory training course. If you have not attended one of the seminars and will not be able to attend one in FY94, contact your AEC representative and ask for a videotape of the course.

The AEC also plans to provide exportable training packages for its facilities. The package will consist of videotapes, lesson plans, tests, stickers, and posters. The U.S. Army Reserves Training Support Package (TSP) is designed to improve knowledge and understanding of the Army storm water program and SWP3 implementation at Reserve facilities. The TSP focuses on five target audiences: facility managers, aircraft support facility personnel, marine support facility personnel, facility employees (including tenants), and spill response team members. The Reserves training package should be available by August 1994 and the Active Army package by December 1994.



PROGRAM DELEGATION TO INSTALLATIONS

Overview

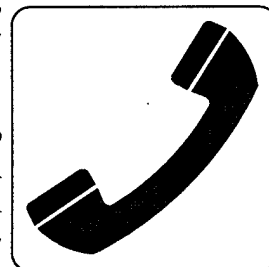
Up until this fiscal year, the Army storm water program has been, for the most part, centrally managed. As discussed in the beginning of this chapter, AEC played a major role in most installations' permit application process, contracting for SWP3 development, training of environmental staff, and regulatory reviews. AEC's new role is to prepare Army installation environmental staff to assume responsibility for their installations' storm water compliance program. Through the use of certain communication tools, AEC plans to provide installations with program assistance, such as the up-to-date information on regulatory issues and Army policies, information papers on compliance issues, and other miscellaneous guidance.

Communication Tools

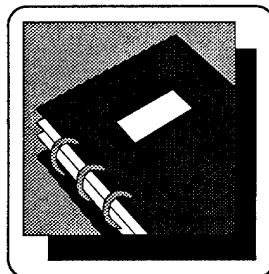
In-Progress Reviews (IPRs) – The AEC conducts quarterly IPRs, the latest of which was conducted on 13-14 April 1994. The purpose of those IPRs is two-fold: they act as mechanisms for information flow among all involved parties, and they identify problems at the execution (installation) level.

Each MACOM is invited to send a representative to these IPRs. Other attendees include representatives from the Army's policy, technical, and legal support areas such as USACE Districts, AEHA, Construction Engineering Research Laboratory (CERL), Center for Public Works (CPW),

Office of the Judge Advocate General (JAG), and Office of the Director of Environmental Programs (ODEP). Many times, the Army also invites a speaker from a regulatory agency to address concerns unique to the Army. To date, the U.S. EPA HQ office has participated in two of the Army's IPRs. Minutes from the last IPR are provided as Appendix J. Following the IPRs, the Army Storm Water Steering Committee meets to discuss the direction of the program, problems that have arisen, and potential solutions.



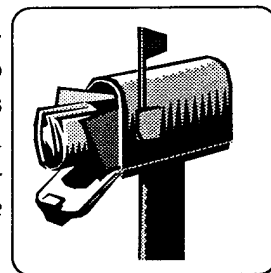
Handbooks and Guidance Manuals – Besides this handbook, storm water model pollution prevention plans are available for installation use (refer to Appendix K). AEC will also issue guidance on implementing Army-specific BMPs, storm water associated with construction activities, regulatory compliance issues (choosing between the multi-sector and the general permit), writing DB 1383s, and other miscellaneous documents as the need arises. Should your installation personnel identify any needs for which more guidance is required, please contact your MACOM storm water



coordinator or your AEC representative (listed in the next section of this chapter).

Information Papers – Information papers usually deal with technical issues. To date, AEHA has written a few such papers on permit application requirements, sampling protocol, and general permit requirements. Appendix K lists all internal Army references currently available. Installations should have copies of these papers. If you need a copy, please contact AEHA or your AEC representative.

Newsletters and Bulletins – By the end of this fiscal year, installations will receive Army storm water newsletters. Those monthly newsletters will inform installation personnel about the latest storm water issues. They will identify all ongoing storm water related activities at the Army HQ level. The newsletters will be used to supplement and update the information provided in this handbook. In addition to newsletters, information will also be distributed through on-line systems, such as Defense Environmental Network Information Exchange (DENIX).



WHERE TO GO FOR PROGRAM ASSISTANCE



Assistance is available in the following categories within the specified agencies:

- *Funding/1383s* – assisting in 1383 project classifications and budget requests.
 - Major Army Commands (MACOMs)
 - Army Environmental Center (AEC)
- *Legal interpretation* – providing regulatory interpretation.
 - Office of the Judge Advocate General (JAG)
- *Monitoring* – sampling and analysis of storm water runoff.
 - Army Environmental Hygiene Agency (AEHA)
 - U.S. Army Corps of Engineers (USACE)

- *Permit applications* – choosing an appropriate application for your installation, filling out application forms.
 - AEC
 - AEHA
- *Permit interpretation/review* – clarifying permit conditions, negotiating permit with regulators, reviewing and commenting on draft permits.
 - AEHA
 - AEC
- *Program management* – providing general information concerning Army policy and regulatory status.
 - AEC
 - MACOMs
 - Office of the Director of Environmental Programs (ODEP)
- *SWP3/BMPs* – developing and implementing SWP3s; recommending and evaluating BMPs.
 - USACE
 - Construction Engineering and Research Laboratory (CERL)
 - AEHA
- *Training* – providing information on available in-class storm water training, manuals, videos.
 - MACOMs

Contact the Army Environmental Center for other miscellaneous problems or inquiries! AEC has been the central manager for the Army storm water compliance program. Duties have included coordinating efforts on research, development and distribution of storm water information (including information on BMPs, and providing guidance on new federal regulations). AEC also acts as the main switchboard for questions and requests for assistance and will refer installations to the proper contact persons.

Contact names and phone numbers at each of the above referenced agencies are provided in Table 4-1. Figure 4-1 is an Army storm water program functional diagram, which shows the relationship between all Army agencies.

Table 4-1.
Army Points of Contact

ARMY AGENCY/POINTS OF CONTACT	Telephone Numbers
U.S. Army Environmental Center (USAEC) Paul Josephson, Project Officer <i>e-mail:</i> pajoseph@thama1.apgea.army.mil	(410) 671-1217/DSN 584-1217
U.S. Army Corps of Engineers (USACE) <i>Mobile Corps District:</i> Joe Long, Engineer Ronnie Gibson, Project Manager Charles Smith, Project Manager <i>Construction Engineering Research Laboratory (CERL):</i> Joe Matherly Rick Scholze <i>Army Center for Public Works (CPW):</i> Robert Fenlason	(205) 694-4085 (205) 690-2688 (205) 694-4216 (217) 373-3488 (217) 373-3488 (703) 806-5201/DSN 656-5201
U.S. Army Environmental Hygiene Agency (AEHA) Michael Robison, Project Leader Wendy Mervine	(410) 671-3919/ DSN 584-3919 (410) 671-3919
U.S. Army Forces Command (FORSCOM) Ron Nichols	(404) 669-7688
U.S. Army Materiel Command (AMC) LTC Tom Allen	(703) 274-9868
U.S. Army Office of the Judge Advocate General (JAG) COL Mark Graham	(703) 696-1230
U.S. Army Reserves Command (USARC) Debbie Richert	(404) 629-8266
U.S. Army Training and Doctrine Command (TRADOC) Mike Cochran	(804) 727-4241
U.S. National Guard Bureau (NGB) CPT Greg Costello	(703) 607-7982
Office of the Director of Environmental Programs (ODEP) Steve Hearne	(703) 696-8078/DSN 226-8078

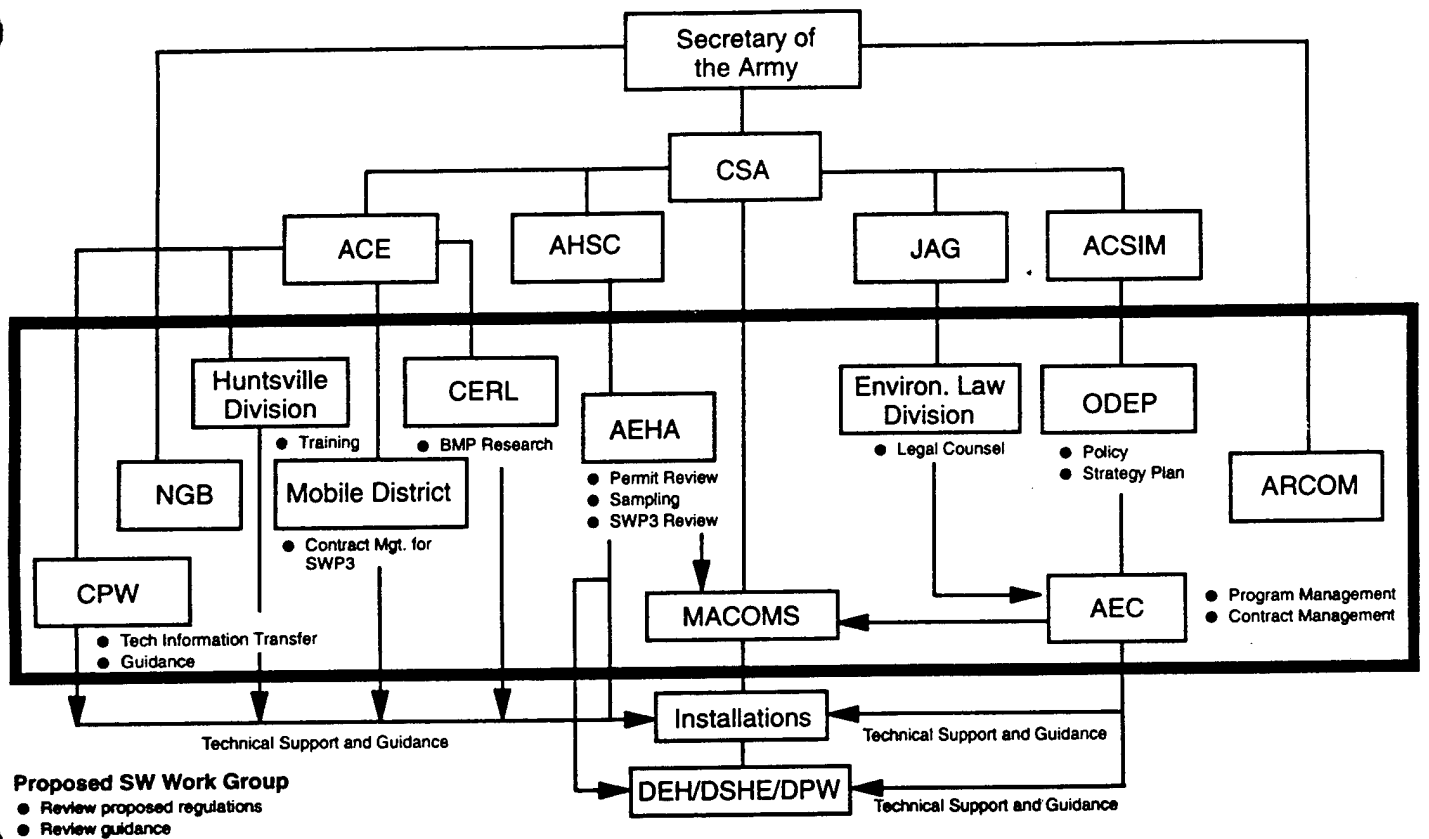


Figure 4-1.
Army Storm Water Program – Functional Diagram

CHAPTER 5

The Permit



BASIC REQUIREMENTS

Preventing pollutants from coming into contact with precipitation and ultimately being discharged into U.S. waters is the objective of storm water permitting. The basic contents of each permit are similar regardless of whether your installation receives an individual, general, or multi-sector permit. The permit will specify who is covered, the conditions under which the facility is covered, and what needs to be done to comply with the permit. Expect to see requirements for the development and implementation of storm water pollution prevention plans, best

management practices, monitoring/sampling, reporting, and standard conditions. The following sections discuss these requirements in detail.

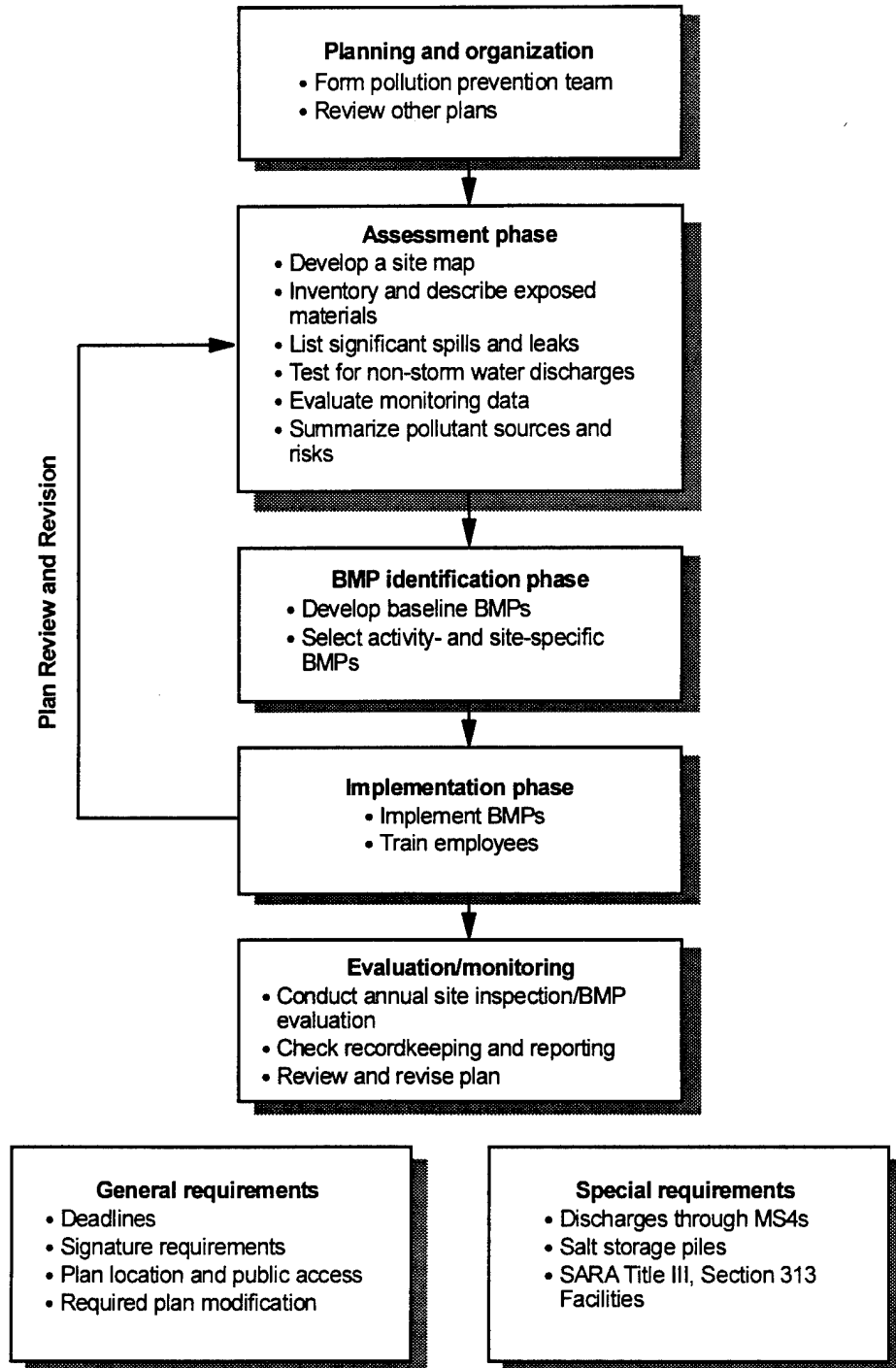
Storm Water Pollution Prevention Plans

This section summarizes the installations' duties to comply with and update the SWP3s. The SWP3s for most FORSCOM, TRADOC, HSC, and USMA installations have been prepared by USACE under contract to AEC.

The core of a storm water permit is an SWP3. The basic premise of that plan is to prevent storm water contamination from occurring in the first place. It identifies potential sources of storm water pollution at industrial activities and the BMPs that will reduce or eliminate those pollutants in storm water discharges. Identification of BMPs and recommendations for implementing them are a major part of an SWP3 (see Figure 5-1).



Figure 5-1 describes the key components of an SWP3. In addition to BMPs, annual reviews, periodic inspections, accurate recordkeeping, and employee training are also key elements of the plan. As shown in Figure 5-1, BMP identification and implementation directly result from the *assessment phase* of the SWP3, during which all installation problems (e.g., storm water contamination scenarios) need to be identified.



Source: EPA Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices, September 1992.

Note: MS4 = Municipal separate storm sewer system; SARA = Superfund Amendment Reauthorization Act.

Figure 5-1.
EPA Storm Water Pollution Prevention Plan Flowchart