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Environmental Compliance Assessment System (ECAS)

U.S. Army
Japan Supplement

The U.S. Army has adopted an environmental compliance program that identifies compliance problems before they are cited as violations by the U.S. Environmental Protection Agency (USEPA).

Major Army Commands (MACOMs) must conduct comprehensive environmental assessments at all installations on a 4-year cycle and conduct a mid-cycle internal assessment. Because each MACOM developed a separate system, the Army mandated a unified, Army-wide assessment mechanism, which combines Federal, Department of Defense (DOD), and Army environmental regulations; good management practices; and risk-management issues into a series of checklists that show requirements and specific items or operations to review. Each protocol lists a point of contact to help assessors review checklist items.

The Worldwide Environmental Compliance Assessment System (ECAS) manual incorporates checklists from USEPA and from private industry. It integrates information from the Overseas Environmental Baseline Guidance Document (OEBGD). Worldwide ECAS includes pertinent information from Army Regulations and DOD Directives and Instructions and cites management practices for an overall environmental review.

The ECAS JAPAN supplement incorporates Japanese legislation, regulations, and suggested management practices. It was developed for use in conjunction with the Worldwide ECAS manuals (USACERL SR-EC-93/03) and is updated continually to address changes in Japanese laws and regulations.

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David A. Krooks and Tina M. Hurt

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The U.S. Army has adopted an environmental compliance program that identifies compliance problems before they are cited as violations by the U.S. Environmental Protection Agency (USEPA). Major Army Commands (MACOMs) must conduct comprehensive environmental assessments at all installations on a 4-year cycle and conduct a mid-cycle internal assessment. Because each MACOM developed a separate system, the Army mandated a unified, Army-wide assessment mechanism, which combines Federal, Department of Defense (DOD), and Army environmental regulations; good management practices; and risk-management issues into a series of checklists that show requirements and specific items or operations to review. Each protocol lists a point of contact to help assessors review checklist items. The Worldwide Environmental Compliance Assessment System (ECAS) manual incorporates checklists from USEPA and from private industry. It integrates information from the Overseas Environmental Baseline Guidance Document (OEBGD). Worldwide ECAS includes pertinent information from Army Regulations and DOD Directives and Instructions and cites management practices for an overall environmental review.The ECAS JAPAN supplement incorporates Japanese legislation,regulations, and suggested management practices. It was developed for use in conjunction with the Worldwide ECAS manuals (USACERL SR-EC-93/03) and is updated continually to address changes in Japanese laws and regulations.

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FOREWORD

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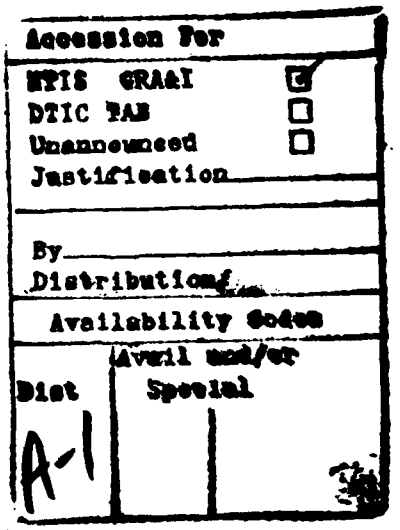
The research was performed by the Environmental Compliance Modeling and Systems Division (EC) of the Environmental Sustainment Laboratory (EL), U.S. Army Construction Engineering Research Laboratories (USACERL). The Principal Investigator was Dr. David A. Krooks, Environmental Compliance Protocol Team, CECER-ECP. Tina M. Hurt, CECER-ECP, was Associate Investigator. Dr. Diane K. Mann is Acting Team Leader, CECER-ECP, and Dr. John Bandy is Acting Chief, CECER-EC. William D. Goran is Acting Chief, CECER-EL.

LTC David J. Rehbein is Commander of USACERL and Dr. L. R. Shaffer is Director.



NOTICE

This manual is intended as general guidance for personnel at certain U.S. Army installations in Japan. It is not, nor is it intended to be, a complete treatise on the environmental laws and regulations of Japan. Neither the U.S. Government, nor any agency thereof, nor any of its employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information contained herein. For any specific questions about, or interpretations of, the legal references herein, consult appropriate legal counsel.

Table of Contents

INTRODUCTORY SECTION

Title	Page
Japanese Environmental Protection Measures	v
Structure of Environmental Administration in Japan	vii
Japanese Environmental Law	ix
Manual Approach	xi
Definitions	xiii
Logic Table	xv
Contact/Location Codes	xxiii

PROTOCOL SECTION

Section	Title	Page
1	Air Emissions Management	1-1
2	Hazardous Materials Management	2-1
3	Hazardous Waste Management	3-1
4	Natural and Cultural Resources Management	4-1
5	Environmental Noise Management	5-1
6	Pesticide Management	6-1
7	Petroleum, Oil, and Lubricant (POL) Management	7-1
8	Solid Waste Management	8-1
9	Special Programs Management	9-1
10	Water Quality Management	10-1

JAPANESE ENVIRONMENTAL PROTECTION MEASURES

Understanding the scope and depth of environmental law in Japan from the perspective of someone familiar with American environmental laws and regulation is difficult due to several factors. There is no central authority in Japan overseeing the implementation and administration of the entire range of the various environmental laws, cabinet and prime minister's orders, and environmental regulations. Although a certain amount of centralization has occurred since 1971 with the establishment of the Environment Agency and the consolidation of widely disparate pollution control functions, the setting of regulations and the implementation of laws and regulations are still diffused among several agencies and governments.

The laws, orders, and regulations dealing with environmental issues in many cases are difficult to read and understand in their English translations. In addition, it is not enough to have a single law, cabinet order for that law, and regulations by your side when interpreting the law. Various other laws, regulations, ordinances, and policy papers may all play a part in the correct interpretation and application of a single or set of laws to a particular situation.

This manual is divided into ten functional areas (called protocols) of environmental compliance issues. The introduction to each of these protocols provides an explanation of the Japanese environmental laws and regulations that may apply to a particular installation's operations. Because the body of Japanese environmental law which has been translated into English is incomplete, there are relatively few compliance requirements outlined in the protocols. And, because the Japanese environmental system differs from the one in the United States, emphasis is placed on different environmental concerns; in fact, some concerns in the United States are completely lacking in Japan. For these reasons, the Worldwide ECAS manual should always be consulted in conjunction with this compliance manual.

This manual is designed to incorporate all major Japanese national legislation. Installations should obtain from their local Defense Facilities Administration Offices (DFAOs), or from the Environmental Sub-Committee of the Joint United States - Japan Committee, any town, municipal, or prefectural requirements or regulations.

STRUCTURE OF ENVIRONMENTAL ADMINISTRATION IN JAPAN

The following is a description of the Environment Agency, several of its bureaus and departments, and the basic environmental statute for Japan.

The Environment Agency is charged with the formulation and promotion of fundamental environmental policies, coordination of budgeting policies for pollution-control expenditures, the management of appropriations for environmental research and development, and overall coordination of the various government agencies responsible for environmental protection. The Agency promulgates "environmental quality standards." They are not legally binding, but are values thought to represent desirable maximum levels for certain pollutants, usually to be attained within a certain period of time.

The Environment Agency has one department and four bureaus charged with promulgating regulations and helping to insure full compliance with environmental laws and regulations. Within these offices there are numerous sub-Agencies or divisions, each of which has a particular set of responsibilities.

The Environmental Health Department, among other duties, insures compliance with the *Pollution-Related Health Damage Compensation Law* (Law No. 111 of 5 October 1973 as amended through Cabinet Order No. 368 of 4 November 1987) and designates the items to be tested for new chemicals pursuant to the *Law Concerning the Screening and Regulation of the Manufacture of Chemical Substances* (Law No. 117 of 16 October 1973 as amended through Law No. 44 of 1986).

The Nature Conservation Bureau is responsible for enforcing the *Natural Parks Law* and other laws concerning the protection, management, and maintenance of natural parks and wildlife.

The Air Quality Bureau establishes environmental quality standards; regulates the amount of soot, smoke, and dust emitted by factories; controls offensive odors; specifies permissible automobile noise limits; and promotes comprehensive measures for the prevention of motor vehicle pollution.

The Water Quality Bureau, among other duties, regulates factory effluents, establishes environmental water quality standards, specifies waste disposal criteria, specifies remedial measures to be implemented in the event of soil contamination, and establishes standards for waste disposal and sewage sludge treatment. The Bureau's Water Quality Management Division and Water Pollution Control Division are in charge of regulating water pollution.

Finally, the Planning and Coordination Bureau is responsible for the planning, drafting, and promotion of basic policies relating to environmental protection, overall coordination of environmental protection services performed by other agencies, and the coordination of the policies of these agencies in estimating expenditures for pollution control and conservation of nature.

In addition to the activities conducted by the Environment Agency, other ministries are involved administratively in antipollution activities. The Ministry of Transportation has authority over regulatory activities concerning motor vehicle exhaust gas and noise under the *Road Transportation Vehicle Law*. The Ministry of Health and Welfare sets the standards for waste collection and transportation (excluding the setting of standards for final disposal of waste). Other ministries work in conjunction with the Environment Agency, establishing standards and/or overseeing the enforcement of such standards.

JAPANESE ENVIRONMENTAL LAW

The *Basic Law for Environmental Pollution Control* sets out the framework for the policies of environmental protection and conservation in Japan. Enacted in 1967, this law's stated purpose is the protection and preservation of a "healthy and civilized life for the nation." It is designed to identify the responsibilities that business enterprises, the national and local governments, and the public have for the protection and enhancement of the environment. The law identifies six areas of environmental concern: air pollution, water pollution, noise pollution, vibration, ground subsidence, and offensive odor pollution.

Enterprises have the responsibility for taking measures necessary for the prevention of environmental pollution, including the treatment or disposal of smoke and soot, polluted water, wastes, and other byproducts resulting from their activities. Enterprises must also cooperate with national and local governments in actions designed to prevent environmental pollution. In addition, they must take precautionary measures to prevent environmental pollution which might be caused by the use of the products they manufacture or process. Each enterprise shall bear all or part of the necessary cost of the measures taken by national or local authorities for controlling environmental pollution arising from the industrial activities of the enterprise.

The State, or national government, in order to safeguard the public's health, is responsible for establishing and implementing fundamental, comprehensive policies for controlling environmental pollution.

Local governmental bodies (prefectures and municipalities) are to adhere to national policies and guidelines for the protection of the health of the people and the conservation of the environment. They are also required to formulate and implement appropriate measures for environmental pollution control which take into account the specific natural and social conditions of the concerned area. Prefectural governments are responsible mainly for the implementation of measures covering wide areas and also for the coordination of measures to be taken by the local municipal governments. All 47 prefectures in Japan have enacted ordinances for environmental protection.

The public is exhorted to contribute to the protection and conservation of the environment in all "appropriate ways," including, but not limited to, cooperating with the national and local governments in their efforts to implement pollution control programs.

Other major and minor environmental laws will be discussed in relevant protocols in the manual. For convenience, a list of the major laws and the dates they were first enacted is presented here:

1. *Basic Law for Environmental Pollution Control (1967)*

2. Pollution control laws:
   Air Pollution Control Law (1968)
   Water Pollution Control Law (1970)
   Clean Lakes Law (1984)
   Noise Regulation Law (1968)
   Marine Pollution Control Law (1970)
   Soil Pollution Control Law (1970)
   Waste Management Law (1970).

3. Other related laws:
   Sewage Law (1958)
   Chemicals Control Law (1973)
   Health Damages Compensation Law (1973)
   Pollution-Related Crimes Law (1970).

MANUAL APPROACH

Military communities engage in many operations and activities that can adversely affect public health and the environment if not controlled or properly managed. Many of these activities and operations are subject to local, prefectural, and national directives and regulations.

After a review of these activities at military communities, it was apparent that there were major categories of environmental compliance into which most environmental regulations and military community activities could be grouped.

This manual is divided into 10 major sections that correspond to these environmental categories:

Section	Environmental Category
1	Air Emissions Management
2	Hazardous Materials Management
3	Hazardous Waste Management
4	Natural and Cultural Resources Management
5	Environmental Noise Management
6	Pesticide Management
7	Petroleum, Oil, and Lubricant (POL) Management
8	Solid Waste Management
9	Special Programs Management
10	Water Quality Management

Each Section is organized in the same format:

A. Applicability

This section provides guidance on the major activities and operations included in the protocol and a brief description of the major application.

B. Japanese Legislation and Regulations

This section identifies national laws and other regulations that address requirements associated with the specific compliance category.

C. Prefectural Regulations

This section identifies prefectural and local regulations that address requirements associated with the specific compliance category.

D. Key Compliance Definitions

This section of each protocol presents definitions for those key terms associated with each environmental category.

F. Assessment Checklist

The final section of each protocol contains evaluation procedures (worksheets) composed of statements of requirements or guidelines that serve as indicators to point out possible environmental problems, as well as practices, conditions, and situations that could indicate potential problems. They are intended to focus attention on the key questions and issues that should be investigated. Instructions are provided to direct the evaluator to the appropriate action, reference, or activity that corresponds to the specific requirement or guideline.

DEFINITIONS

Environmental Pollution - any situation in which human health and the living environment are damaged by air, water, soil, and noise pollution. In addition, this term applies to vibration, most types of ground subsidence, and offensive odors.

Living Environment - includes property closely related to human life, animals and plants closely related to human life, and the environment in which such animals and plants live.

LOGIC TABLE

The logic table on the following pages allows the user of this manual to locate quickly those sections of the manual that apply to a particular Army function or activity. For example, a person looking for Japanese law and regulatory requirements concerning photo labs would note that he or she will find the necessary information in the *Air Emissions Management*, *Hazardous Materials Management*, *Hazardous Waste Management*, *Solid Waste Management*, and *Water Quality Management* protocols.

Logic Table - Japan

Areas of Inspection	PROTOCOLS				
	Air Emissions Management 1	Hazardous Materials Management 2	Hazardous Waste Management 3	Natural & Cultural Resources Management 4	Environmental Noise Management 5
I. ADMINISTRATION					
1. General Administrative Area					
2. Data Processing					
3. Photo Labs	•	•	•		
4. Printing Operations		•	•		
II. AIRCRAFT MAINTENANCE					
1. AGE Shops	•	•	•		•
2. Aircraft Maintenance Shops	•	•	•		
3. Battery Shops	•	•	•		
4. Corrosion Control	•	•	•		
5. Engine Shops	•	•	•		•
6. Engine Test	•	•	•		•
7. Machine Shops		•	•		
8. Maintenance Hangars	•	•	•		•
9. Metal Fatigue Inspections		•	•		
10. Plastics Shops	•				
11. Plating Shop	•	•	•		
12. Pneumatic Shops		•	•		
13. Tire and Wheel Shops	•	•	•		
14. Welding Shops	•	•	•		
III. CIVIL ENGINEERING					
1. Battery Shops	•	•	•		
2. Electric Shop	•		•		
3. Entomology Shop	•	•	•	•	
4. Fire Department	•	•	•		
5. Heating Plants	•	•	•		•
6. Incinerator	•				
7. Machine Shops		•	•		

Logic Table--Japan (Continued)

Areas of Inspection	PROTOCOLS				
	Pesticide Management	POL Management	Solid Waste Management	Special Programs Management	Water Quality Management
	6	7	8	9	10
I. ADMINISTRATION					
1. General Administrative Area			•		•
2. Data Processing			•		
3. Photo Labs			•		•
4. Printing Operations			•		
II. AIRCRAFT MAINTENANCE					
1. AGE Shops		•	•		•
2. Aircraft Maintenance Shops		•			
3. Battery Shops			•		•
4. Corrosion Control			•		•
5. Engine Shops					•
6. Engine Test		•	•		•
7. Machine Shops			•		
8. Maintenance Hangars					•
9. Metal Fatigue Inspections			•		•
10. Plastics Shops			•		
11. Plating Shop					•
12. Pneumatic Shops					•
13. Tire and Wheel Shops			•		•
14. Welding Shops			•		
III. CIVIL ENGINEERING					
1. Battery Shops			•		•
2. Electric Shop					•
3. Entomology Shop	•				•
4. Fire Department		•			•
5. Heating Plants					•
6. Incinerator		•	•		•
7. Machine Shops			•		

Logic Table--Japan (Continued)

Areas of Inspection	Air Emissions Management	Hazardous Materials Management	Hazardous Waste Management	Natural & Cultural Resources Management	Environmental Noise Management
	PROTOCOLS				
	1	2	3	4	5
III. CIVIL ENGINEERING (Continued)					
8. Paint Shops	•	•	•		
9. Pavement and Ground		•	•	•	•
10. Plants		•	•		
11. Pneumatic Shops		•	•		
12. POL	•	•	•		
13. Power Production	•	•	•		•
14. Structural Shops	•	•	•		•
15. Waste Water Treatment Plants	•	•	•		
16. Welding Shops	•	•	•		
IV. FIRING RANGES					
1. Bombing, Gunnery and Small Arms Ranges	•	•	•		•
V. SUPPLY/LOGISTICS					
1. Battery Shops	•	•	•		
2. POL	•	•	•		
3. Supply		•	•		
VI. TRANSPORTATION					
1. Battery Shops	•	•	•		
2. Machine Shops		•	•		
3. Paint Shops	•	•	•		
4. Pneumatic Shops		•	•		
5. Tire and Wheel Shops	•	•	•		
6. Vehicle Operations and Maintenance	•	•	•		
7. Welding Shops	•	•	•		

Logic Table--Japan (Continued)

Areas of Inspection	PROTOCOLS				
	Pesticide Management 6	POL Management 7	Solid Waste Management 8	Special Programs Management 9	Water Quality Management 10
III. CIVIL ENGINEERING (Continued)					
8. Paint Shops			•		•
9. Pavement and Ground			•		
10. Plants			•		•
11. Pneumatic Shops					•
12. POL		•	•		
13. Power Production		•	•		•
14. Structural Shops			•		
15. Waste Water Treatment Plants			•		•
16. Welding Shops			•		
IV. FIRING RANGES					
1. Bombing, Gunnery and Small Arms Ranges			•		
V. SUPPLY/LOGISTICS					
1. Battery Shops			•		•
2. POL		•	•		•
3. Supply					•
VI. TRANSPORTATION					
1. Battery Shops			•		•
2. Machine Shops			•		
3. Paint Shops			•		•
4. Pneumatic Shops					
5. Tire and Wheel Shops			•		•
6. Vehicle Operations and Maintenance			•		•
7. Welding Shops			•		

Logic Table--Japan (Continued)					
	PROTOCOLS				
Areas of Inspection	Air Emissions Management 1	Hazardous Materials Management 2	Hazardous Waste Management 3	Natural & Cultural Resources Management 4	Environmental Noise Management 5
VII. MWR					
1. Battery Shops	•	•	•		
2. Paint Shops	•	•	•		
3. Photo Labs	•	•	•		
4. Structural Shops	•	•	•		•
5. Vehicle Operations and maintenance	•	•	•		
6. Welding Shops	•	•	•		
VIII. MEDICAL					
1. Photo Labs	•	•	•		

Logic Table--Japan (Continued)					
PROTOCOLS					
Areas of Inspection	Pesticide Management 6	POL Management 7	Solid Waste Management 8	Special Programs Management 9	Water Quality Management 10
VII. MWR					
1. Battery Shops			•		•
2. Paint Shops			•		•
3. Photo Labs			•		•
4. Structural Shops			•		
5. Vehicle Operations and maintenance		•	•		•
6. Welding Shops			•		
VIII. MEDICAL					
1. Photo Labs			•		•

CONTACT/ LOCATION CODES

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(3) Preventive Medicine Officer
(4) Safety and Health Officer
(5) Fire Department
(6) Director of Logistics (DOL)
(7) Fuels Management Officer (DOL/DEH)
(8) Transportation/Maintenance Officer (DOL)
(9) Chief of Operations and Maintenance (O&M)
(10) Range Control (DPTMSEC)
(11) Aviation Commander (DPTMSEC)
(12) Director of Plans, Training, Mobilization, and Security (DPTMSEC)
(13) Engineering, Plans, & Services (EP&S)
(14) Wastewater Treatment Plant Supervisor (O&M)
(15) Land Management Officer (DEH)
(16) Building and Grounds Division (DEH)
(17) Entomology Shop (DEH)
(18) TSDF Operators (DEH, DOL, DRMO)
(19) Shop Activity Supervisor
(20) Director of Contracting (DOC)
(21) Public Affairs Office (PAO)
(22) Staff Judge Advocate (SJA)
(23) Defense and Reutilization Marketing Office (DRMO)
(24) Utilities Division (Interior Electric Shop)
(25) Utilities Division (Exterior Electric Shop)
(26) Master Planner (DEH)
(27) Inspector General (IG)
(28) School Principal
(29) Installation Commander (IC)
(30) Army and Air Force Exchange Service (AAFES)
(31) Directorate of Personnel and Community Activities (DPCA)
(32) Directorate of Resource Management (DRM), Internal Control
(33) Golf Course Pesticide Shop
(34) Civilian Personnel Office (CPO)

Section 1

Air Emissions Management

Section 1

AIR EMISSIONS MANAGEMENT

A. Applicability

This protocol applies to U.S. Armed Forces installations with facilities and vehicles that emit certain types and specified levels of contaminants into the air.

B. Japanese Legislation and Regulations

- *Air Pollution Control Law* (Law No. 97 of 1968 as amended through Law No. 65 of 1974) is the basic law controlling the emission of pollutants into the air. It is designed to promote the public health and preserve the living environment from air pollution by regulating the emission of soot, smoke, and dust arising from industrial plants and business establishments, and by establishing the maximum permissible limits of motor vehicle exhausts and of certain other sources of air pollution. The law provides definitions for the facilities and types of pollution regulated; gives authority to the Prime Minister's Office to set emission standards for soot and smoke emitting facilities; mandates that governors of prefectures where there is difficulty in attaining the standards as set out in Paragraph 1, Article 9 of the *Basic Law for Environmental Pollution Control* (Law No. 132 of 1967) formulate a soot and smoke total mass reduction plan; allows the Director General of the Environment Agency and prefectural governments to promulgate special emission standards and plans when certain areas or establishments need special attention; requires reporting by persons planning to establish a soot and smoke emitting facility; and provides enforcement provisions. It also gives authority to the Director General of the Environment Agency to establish maximum permissible limits of motor vehicle exhausts. Interestingly, the person responsible for a soot and smoke emitting facility is the person who measures and keeps records of the volume and density of the soot and smoke generated by his or her facility.

- *Cabinet Order for Implementation of the Air Pollution Control Law* (Law No. 329 of 1968 as amended through Cabinet Order No. 162 of 1985) lists the specified substances, types of procedures, and facilities affected by the *Air Pollution Control Law.*

- *Enforcement Regulation of the Air Pollution Control Law* (Ministry of Health and Welfare and Ministry of International trade and industry Ordinance No. 1 of 22 June 1971 as amended through Prime Minister's Office Ordinance No. 53 of 1987) provides the detailed methodologies necessary for carrying out the

broad mandates of the *Air Pollution Control Law* and for measuring and assessing the substances, procedures, and regulated items set out in the *Cabinet Order for Implementation of the Air Pollution Control Law.*

- *Environmental Quality Standards Regarding Air Pollution* (Notification No. 25 of the Environment Agency, 8 May 1973) contains standards and target dates for the attainment of those standards which are considered to be desirable maximum pollutant levels. Their purpose is to maintain the health of humans and the surrounding environment. Although these standards were developed pursuant to Article 9 of the *Basic Law for Environmental Pollution Control* (Law No. 132 of 1967), they are not considered to be legally binding.

- *Permissible Limits of Motor Vehicle Exhaust Emissions* (Ministry of Transportation) sets the standards for exhaust limits for any vehicle used on the road and outlines the procedure for the certification of vehicles.

- *Permissible Limits of Motor Vehicle Emissions* (Notification No. 53 of the Environment Agency, 4 September 1975 as amended through Notification No. 1, 29 January 1988) sets standards for both new and on-the-road vehicles.

- *Road Transportation Vehicle Law* (Law No. 1[illegible] of 1 June 1951) has as one of its purposes to promote the use of transportation vehicles that are properly equipped so as to prevent environmental pollution and thus increase the public welfare. Chapter 3 defines safety standards (i.e., technological standards in terms of prevention of environmental pollution and safety operation) of road transportation vehicles. Chapter 5 defines surveillance of the vehicles for examining whether they satisfy the safety standards.

C. Prefectural Regulations

At the present time, specific regulations enacted by prefectural governments are inaccessible. The following are actions that prefectural and local governments can take concerning air emissions management, based on provisions in national regulations and legislation. Obtain from the Defense Facilities Administration Office (DFAO) any and all information concerning town, municipality, and prefectural standards or regulations.

- Emission Standards - if a prefecture finds that existing emission standards with respect to soot and dust are inadequate to protect public health or to conserve the living environment, it may establish by prefectural ordinance a stricter emission standard with respect to such pollutants generated by soot and smoke emitting facilities in an area. The prefecture must notify in advance the Director General of the Environment Agency of its intention to do so.

- Total Mass Emission Control Standards - in areas in which it is difficult to attain air quality standards, prefectural governors shall formulate a designated soot and smoke total mass reduction plan.

- Order for Modification in Proposed Plan - in the case of a new soot and smoke emitting facility, a plan must be made by the person responsible for the facility. If estimated omissions levels exceed emission standards, the governor may order the responsible person to modify his plan relating to the structure, the method of operation, or the method of soot and smoke disposal of the proposed soot and smoke emitting facility, or to eliminate the plan for the installation of the proposed soot and smoke emitting facility.

- Order for Improvement - if a prefectural governor finds that a facility will likely continuously emit soot and smoke exceeding specified emission standards and that continued emissions may cause damage to human health or the living environment, the governor may order the responsible person to improve the structure, the method of operation, or the method of disposal of soot and smoke generated by the facility, or to suspend the operation of the facility temporarily.

- Measuring of Density of Motor Vehicle Exhausts - the prefectural governor has the responsibility for measuring the density of motor vehicle exhausts in the air, in the road, or in places surrounding the road where serious air pollution by motor vehicle exhausts occurs or is likely to occur. If the governor finds permissible emission levels are exceeded, he or she shall request the Prefectural Public Safety Commission to take measures in accordance with the provisions of the *Road Traffic Law* (Law No. 105 of 1960).

- Monitoring the Level of Air Pollution - the prefectural governor is responsible for monitoring and surveying periodically the level of air pollution. If the pollution reaches the extent which may cause damage to human health or the living environment (standards found in Table 5 of the *Cabinet Order for the Implementation of the Air Pollution Control Law* (Law No. 329 of 1968 as amended through Law No. 162 of 1985)) the governor should *call attention to such a situation* and ask soot and smoke emitting facilities and users or drivers of motor vehicles to cooperate in reducing the level of soot and smoke emission or in voluntarily curtailing the operation of their motor vehicles.

- Report and Inspection - in order to implement the laws, the prefectural governor may require a soot and smoke emitting facility, or a person installing a particulate discharging facility, to report certain matters. These include the conditions of the facility and any accident reports concerning the facility. In addition, the governor may have officials of the prefectural government enter into a facility to make an inspection.

Local public entities are entitled under the *Air Pollution Control Law* to institute regulations on the emission into the air of substances other than soot and smoke generated by soot and smoke emitting facilities, the emission into the air of soot and smoke generated by facilities other than soot and smoke emitting facilities, and the discharge or scattering into the air of particulates generated, discharged, or scattered by facilities other than particulates discharging facilities.

D. Key Compliance Definitions

- *Boiler* - applies to hot blast boilers only. This term does not refer to boilers that use electricity or waste heat alone.

- *Environmental Quality Standards* - standards designed to maintain the "health of human beings and the conservation of one's living surroundings." The standard concerning air pollution is established for five air pollutants: sulfur dioxide (SO_2), carbon monoxide, suspended particulate matters, photochemical oxidant, and nitrogen dioxide (NO_2).

- *Exhaust Gas from Motor Vehicle* - carbon monoxide, hydrocarbons, lead compounds, nitrogen oxides, and particulates exhausted from operating motor vehicles.

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Particulates* - any substance discharged or scattered as a result of mechanical treatments, such as crushing and the selection of material or a heap of material.

- *Particulates Discharging Facility* - any facility designated by cabinet order that discharges, emits, or scatters particulates which may cause air pollution, including facilities installed in an industrial plant or business establishment that discharges and scatters particulates.

- *Soot and Smoke* - major pollutants which are the object of control under the *Air Pollution Control Law*. These include:
  - sulfur oxides generated as a result of combustion of fuel and similar activities
  - nitrogen oxides
  - soot and dust generated as a result of combustion of fuel and similar activities, or as a result of the use of electricity as a heat source
  - cadmium and its compounds, chlorine and hydrogen chloride, fluorine, hydrogen fluoride and silicon fluoride, and lead and its compounds which are generated as a result of the combustion, synthesis, resolution

and other treatments (excluding mechanical treatments) designated by the cabinet order as those liable to adversely affect human health or the living environment.

- *Soot and Smoke Disposing Facility* - any facility that disposes of soot and smoke generated from a soot and smoke emitting facility.

- *Soot and Smoke Emitting Facility* - any facility designated by cabinet order installed in an industrial plant or a business establishment that generates and emits soot and smoke which may cause air pollution. Those designated facilities which may be located on Armed Forces installations include boilers and waste incinerators.

- *Specific Substances* - this refers to the following 28 types of airborne pollutants (excluding soot and smoke pollutants) for which emission control and/or reduction regulations are promulgated:
  - ammonia
  - hydrogen fluoride
  - hydrogen cyanide
  - carbon monoxide
  - formaldehyde
  - methanol
  - hydrogen sulfide
  - hydrogen phosphide
  - hydrogen chloride
  - nitrogen disoxide
  - acrolein
  - sulfur dioxide
  - chlorine
  - carbon bisulfide
  - benzene
  - pyridine
  - phenol
  - sulfuric acid (including sulfur trioxide)
  - silicon fluoride
  - phosgene
  - selenium dioxide
  - chlorosulfonic acid
  - yellow phosphorus
  - phosphorus trichloride
  - bromine
  - nickel carbonyl
  - phosphorus pentachloride
  - mercaptan.

- *Total Mass Emission Control Standards* - areas that have a concentration of factories and industrial establishments and are designated by cabinet order as areas where it is recognizably difficult to attain air quality standards. In these areas, the governor of the prefecture formulates a designated soot and smoke total mass reduction plan.

- *Volume of Soot and Smoke* - the volume of sulfur oxides and nitrogen oxides generated by the soot and smoke emitting facility and emitted into the air from an outlet.

- *Waste Incinerator* - an incinerator used for the burning of waste materials.

AIR EMISSIONS MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	1-1 through 1-11	(1)(2)(3)(6)(9)
Vehicle Emissions	1-12 and 1-13	(1)(2)(9)

*CONTACT/LOCATION CODE:

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(3) Preventive Medicine Officer
(6) Director of Logistics (DOL)
(9) Chief of Operations and Maintenance (O&M)

COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
1-1. Determine actions or changes since previous review of air emissions (GMP).	Examine a copy of previous review report to determine if noncompliance issues have been resolved. (1)(2)
...	...
1-2. Installations should maintain copies of all relevant host nation and prefectural regulations on air emissions (GMP).	Determine if copies of the following regulations are maintained and kept current at the installation: (1)(2)(3) - *Air Pollution Control Law* (Law No. 97 of 1968 as amended through Law No. 65 of 1974). - *Cabinet Order for the Implementation of the Air Pollution Control Law* (Cabinet Order No. 329 of 1968 as amended through Cabinet Order No. 162 of 1985). - *Enforcement Regulation of the Air Pollution Control Law* (Ministry of Health and Welfare and ministry of International Trade and Industry Ordinance No. 1 of 22 June 1971 as amended through Ordinance No. 31 of 1985). - *Permissible Limits of Emissions from Motor Vehicles*, Environment Agency Notification No. 53, 4 September 1975, as amended through Notification No. 1, 29 January 1988. - *Road Transportation Vehicle Law* (Law No. 185 of 1 June 1951).
...	...
1-3. Installations should be aware of what requirements come into play when prefectural governments declare photochemical smog alerts (GMP).	Verify that the installation is aware of what requirements come into play when prefectural governments declare photochemical smog alerts. (1)(2)
...	...

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COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-4. Any installation that plans to establish a soot and smoke emitting facility is required to provide specified information to the governor of the prefecture in accordance with the provisions of the Order of the Prime Minister's Office (*Air Pollution Control Law*, Articles 6 and 7; *Cabinet Order for Implementation of the Air Pollution Control Law*, Article 8).	Determine whether construction of a new boiler or incinerator is scheduled. (2) Verify that proper notification has been made to host nation authorities through the Defense Facilities Administration Bureau (DFAB). (1)(2) Verify that a report is provided within 30 days of the facility being designated as a soot and smoke emitting facility. (1)(2) Verify that the report contains the following information: (1)(2) - name and location of the installation - type of proposed soot and smoke emitting facility - structure of the proposed soot and smoke emitting facility - method of operating the proposed soot and smoke emitting facility - proposed method of disposing of soot and smoke - proposed method of discharging soot and smoke - location of the soot and smoke emitting and disposing facilities - outline of the operation systems related to the emission and disposal of soot and smoke - locations of discharge gas measuring points, where these measuring points are provided in the flue - emergency communication telephone numbers and other emergency communication methods - volume of sulfur oxides or specific toxic substances generated by the proposed soot and smoke emitting facility and emitted into the air from an outlet (volume of soot and smoke) - volume of soot and dust or toxic substances (excluding specific toxic substances) contained in the pollutants generated by the proposed soot and smoke emitting facility and emitted into the air from an outlet (density of soot and smoke).
...	...
1-5. If changes are made to the plans of the proposed soot and smoke emitting facility, or if the governor of the prefecture in which the facility is to be located requires changes to be made to the facility, the installation has specific reporting and modification duties (*Air Pollution Control Law*, Articles 8 through 10).	Determine if the installation modified its plans for the soot and smoke emitting facility after submitting the original proposal. (1)(2) Verify that the modified plans were submitted to the governor of the prefecture. (1)(2) Determine if the governor of the prefecture ordered that modifications be made to the facility. (1)(2) Verify that the modifications have been made. (1)(2)
...	...

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COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-6. In case of accidental release into the environment of specific substances from a soot and smoke emitting facility, the installation has specific duties and may be subject to orders from the prefectural governor concerning the prevention of future releases (*Air Pollution Control Law*, Article 17).	Determine if any specific substances (see definitions) were released. (1)(2)(3) Verify that the following actions were performed: (1)(2)(3) - emergency measures were taken - the installation took measures to promptly restore the situation to normal after the accidental release of specific substances - if the prefectural governor so orders, the installation has taken necessary measures to prevent recurrence of such accidents.
...	...
1-7. Installations with specific soot and smoke emitting facilities are required to maintain records of the volume and density of soot and smoke generated (*Air Pollution Control Law*, Article 16).	Determine if the installation operates: (1)(9) - boilers with a heating area of 10 square meters (m^2) or above, or those with a combustion rate of a burner of 50 liters (L) or greater per hour when calculated in terms of heavy oil (this does not include those boilers that use electricity as a sole source of heat, but does include hot blast boilers) - waste incinerators with a grate area greater than or equal to 2 m^2 or a rate of incineration greater than or equal to 200 kilograms (kg) per hour. Verify that records of the volume and density of soot and smoke generated are maintained for these facilities. (1)(9)
...	...
1-8. Installations that operate soot and smoke emitting facilities are required to meet specific emission standards (*Air Pollution Control Law*, Article 13).	Verify that emissions do not exceed stipulated levels. (1)(2) (NOTE: These standards are usually found in prefectural regulations.) (NOTE: This provision does not apply to these facilities for 6 months (mo) after the facility is designated as a soot and smoke emitting facility, unless a local public ordinance requires immediate compliance.)
...	...
1-9. Installations are required to have a plan to reduce emissions when they exceed established limits and to submit this in a report to the governor of the prefecture in which the facility is located (*Air Pollution Control Law*, Article 13-2).	Determine whether procedures exist at the installation to reduce operating levels of the following activities when requested to do so by local authorities: (1)(2)(6)(9) - motor vehicle operations - boilers and incinerators.
...	...

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COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

1-10. In areas where the concentration of soot and smoke emitting facilities and the amount of pollutants emitted is high, the Director General of the Environment Agency may set special emission standards with regard to sulfur oxides and dust for any newly established soot and smoke emitting facility in the area (*Air Pollution Control Law*, Article 3; *Cabinet Order for the Implementation of the Air Pollution Control Law*, Article 6).	Determine whether the installation is within an area where special emissions standards apply. (1)(2)
	
	Verify that the installation is complying with the special standards. (1)(2)
	
	Verify that any facilities that began operating recently meet the following criteria: (1)(2)(9)
	
	- sulfur oxide emissions:
	  - 0.04 parts per million (ppm) of daily average of hourly values, except when the number of days with daily average of hourly values 0.04 ppm or above does not exceed 7 days in a year
	- dust emissions:
	  - yearly average of amount in the air: 0.15 milligrams (mg) per cubic meter (m^3).

...	...
1-11. Installations that plan to establish particulates-discharging facilities are required to provide specific information to the governor of the prefecture in accordance with the provisions of the Order of the Prime Minister's Office (*Air Pollution Control Law*, Article 18).	Determine if the installation plans to establish a particulates-discharging facility. (1)(2) Verify that a report will be made within 30 days and will include the following: (1)(2) - name and location of the installation - type of proposed particulates-discharging facility - structure of the proposed particulates-discharging facility - method of operating the proposed particulates-discharging facility - layout drawings of particulates disposal facilities and facilities that prevent particulates from scattering - documents describing the organization of the operation systems relating to the discharge of particulates and the disposal of particulates.
...	...

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COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
VEHICLE EMISSIONS	
1-12. Vehicles must meet specific emission limit requirements (*Air Pollution Control Law*, Article 19; *Permissible Limits of Motor Vehicle Emissions*).	Verify that installation vehicles have received proper certification from the Ministry of Transportation that they have met the standards for permissible emissions as contained in Appendix 1-1. (1)(2)(9)
...	...
1-13. Installations using devices to limit motor vehicle emissions of smoke, odor, and other pollutants must ensure that the equipment meets specific standards (*Road Transportation Vehicle Law*, No. 185 of 1 June 1951, Articles 41 and 44).	Verify that equipment used by the installation to limit motor vehicle emissions of smoke, odor, and other pollutants meets the standards established by the Ministry of Transportation. (1)(2)(9) (NOTE: This question applies to automobiles and scooters (vehicles whose engines have a displacement of less than 50 cubic centimeters (cc)).)

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Appendix 1-1

Permissible Limits of Motor Vehicle Exhaust Emissions (Gasoline or LPG-fueled Vehicles)

					Application date		Standards (maximum permissible limits)
					New model vehicle	Existing model vehicle	
Gasoline of LPG-fueled vehicles	Carbon monoxide (CO)	New vehicle	Control by driving cycle	10-mode	1 DEC 88	1 NOV 89	2.7 g/km for truck and bus (light weight vehicle)
				11-mode	(1 APR 91)	(1 APR 91)	66.0 g/test for truck and bus (light weight vehicle)
			Idling		1 AUG 70	1 AUG 70	4.5%
		Vehicle in use	Idling		1 AUG 70	1 AUG 70	5.5%
					1 OCT 72	1 OCT 72	4.5%
	Hydrocarbon (HC)	New vehicle	Below-by gas control		1 SEP 70	1 JAN 71	Installation of blow by gas recirculation device (0 g/test)
			Fuel evaporative gas control		1 JUL 72	1 APR 78	Installation of fuel evaporative emission control device (20 g/test)
			Control by driving cycle	10-mode	1 DEC 88	1 NOV 89	0.39 g/km for truck and bus (light weight vehicle)
				11-mode	(1 APR 91)	(1 APR 91)	9.5 g/test for truck and bus (light weight vehicle)
		Vehicle in use	Device installation		1 MAY 78	1 MAY 78	Installation of HC/NOx reduction device and adjustment of spark timing
			Idling		1 JAN 75	1 JAN 75	1200 ppm for passenger car and bus with four-stroke engine, 7800 ppm for passenger car and bus with two stroke engine, 3800 ppm for passenger car and bus with special structure engine
					1 JUN 75	1 JUN 75	1200 ppm for truck with four-stroke engine, 7800 ppm for truck with two-stroke engine, 3800 ppm for truck with special structure engine
	Nitrogen oxides (NOx)	New vehicle	Control by driving cycle	10-mode	1 DEC 88	1 NOV 89	0.48 g/km for truck and bus (light weight vehicle)
				11-mode	(1 APR 91)	(1 APR 91)	6.00 g/test for truck and bus (light weight vehicle)
				10-mode	1 OCT 89	1 SEP 90	0.68 g/km for truck and bus (medium-weight vehicle)
				11-mode	(1 APR 91)	(1 APR 91)	8.5 g/test for truck and bus (medium-weight vehicle)
				Gasoline 6-mode			950 ppm for heavy-weight vehicle
				10-mode	1 OCT 90	1 SEP 91	0.74 g/km for mini-sized motor vehicle with four-stroke engine
				11-mode	(1 APR 92)	(1 APR 92)	7.5 g/test for mini-sized motor vehicle with four-stroke engine
		Vehicle in use	Device installation		1 MAY 72	1 MAY 78	Installation of HC/NOx reduction device and adjustment of spark timing
Diesel-powered vehicle	CO, HC, NOx	New Vehicle	Control by driving Cycle	Diesel 6-mode	1 AUG 88 (1 APR 85)	1 JUL 94 (1 APR 85)	610 ppm for DI motor vehicle
	NOx						
	CO, HC, NOx			10-mode	1 DEC 80 (1 APR 88)	1 NOV 91 (1 APR 88)	CO 2.7 g/km, HC 0.62 g/km, NOx 0.62 g/km for passenger cars (RW more than 1250 kg)
					1 OCT 82 (1 APR 94)	1 SEP 88 (1 APR 94)	CO 2.7 g/km, HC 0.62 g/km, NOx 0.84 g/km for passenger cars (RW not more 1250 kg)
	CO, HC, NOx			10-mode	1 DEC 88 (1 APR 91)	1 NOV 89 (1 APR 91)	CO 2.7 g/km, HC 0.62 g/km, NOx 0.84 g/km for truck and bus (light weight vehicle)
				Diesel 6-mode	1 OCT 80 (1 APR 92)	1 SEP 91 (1 APR 92)	950 ppm for heavy weight truck with direct injection type engine (only large-sized tractor and crane vehicle)
							800 ppm for heavy weigh truck with direct injection type engine (only large-sized tractor and crane vehicle)
	Diesel Smoke	New vehicles	Full-load test		1 JUL 72	1 JUL 72	Rate of contamination 40%
		Vehicle in use	No-load acceleration test		1 JAN 75	1 JAN 75	Rate of contamination 40%

INSTALLATION:	COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (6) Director of Logistics (DOL) (9) Chief of Operations and Maintenance (O&M)

Section 2

Hazardous Materials Management

Section 2

HAZARDOUS MATERIALS MANAGEMENT

A. Applicability

This protocol is applicable to U.S. Armed Forces installations in which workers are routinely exposed to hazardous materials (for example, chlorine and benzene). At present, protocol information addresses the handling of these two and other substances.

B. Japanese Legislation and Regulations

- *Fire Prevention Law* is a lengthy, comprehensive law addressing many aspects of fire prevention and control involving various items and industries in Japan. Under this law a number of cabinet orders concerning different areas of fire prevention have been promulgated. For hazardous materials, the main cabinet order is the *Cabinet Order Concerning the Regulation of Hazardous Substances.*

- *Cabinet Order Concerning the Regulation of Hazardous Substances* contains specifications for the proper storage, handling, and transport of hazardous substances in order to reduce the risk of fire, accidental spillage or leakage, or other dangers associated with toxic and hazardous substances.

- *Ordinance on Prevention of Hazards Due to Specified Chemical Substances* (Ministry of Labor Ordinance No. 39, 30 September 1972 as revised through Ordinance No. 33 of 16 August 1978) is designed to help in the prevention of the occurrence of cancers, dermatitis, neurological disorders, and other health impairments in workers resulting from chemical and similar substances. The Labor Standards Inspection Office and the Ministry of Labor are the entities charged with maintaining compliance with the law. Article 39 of this ordinance is concerned with medical examinations of workers exposed to certain hazardous substances. It stipulates the types of medical examinations required and the frequency of their occurrence for workers dealing with these substances.

- *Poisonous/Harmful Substances Regulation Law* (Law No. 303 of 1950 as amended by Law No. 90 of 1985) is designed to regulate poisonous and harmful substances from the standpoint of public sanitation.

C. Prefectural Regulations

At present, no information is available regarding specific prefectural regulations of hazardous materials. Under the *Ordinance on Prevention of Hazards due to Specified Chemical Substances*, the burden is on the employer to direct his or her workers to deal with hazardous substances in the manner as set out by the Ministry of Labor. Prefectural governments have no authority under this ordinance to require employers to do anything. Undoubtedly, prefectural governments should have at least the same type of authority under inherent police powers to regulate the storage of flammable and combustible materials within their prefectures, similar to the authority of U.S. states and localities.

D. Key Compliance Definitions

The following definitions were obtained from the Ministry of Labour Ordinance listed previously.

- *Designated Amount* - refers to the storage of hazardous substances (see Appendix 2-1).

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Harmful Substances* - those substances listed in Appendix 2-2.

- *Poisonous Substances* - those substances listed in Appendix 2-3.

- *Specific Poisonous Substances* - those substances listed in Appendix 2-4.

- *Storage Facilities* - there are seven basic types of storage areas or facilities outlined in, and regulated by, the *Cabinet Order Concerning the Regulation of Hazardous Substances.* These are:
  - inside storage (storage within a building)
  - outside storage (storage outside a building)
  - inside tank storage (storage in tanks within a building)
  - outside tank storage (storage in tanks outside a building)
  - underground tank storage
  - simple tank storage (generally, smaller storage tanks)
  - mobile tank storage (a tank fixed on a vehicle).

(NOTE: For the purposes of this manual, regulations concerning outside tank storage, underground tank storage, and mobile tank storage are discussed in the *Petroleum, Oil, and Lubricant (POL) Management* section.)

HAZARDOUS MATERIALS MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	2-1 through 2-3	(1)(2)(5)(6)(7)
Inside Storage	2-4	(1)(2)(4)(5)
Inside Tank Storage	2-5 through 2-7	(1)(2)(4)(5)
Simple Tank Storage	2-8	(1)(2)
Outside Storage	2-9	(1)(2)
Fire Extinguishing Standards	2-10	(1)(2)(4)(5)
Fire Alarm	2-11	(1)(2)(4)(5)
Storage and Handling	2-12 through 2-14	(1)(2)(3)(4)(5)
Signs	2-15	(1)(2)(4)
Worker Protection	2-16 and 2-17	(2)(3)
Releases	2-18	(1)(2)

***CONTACT/LOCATION CODE:**

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(3) Preventive Medicine Officer
(4) Safety and Health Officer
(5) Fire Department
(6) Director of Logistics (DOL)
(7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
2-1. Determine actions or changes since previous evaluation of hazardous materials management (GMP).	Examine copies of previous reviews to determine if noncompliance issues have been resolved. (1)(2)
...	...
2-2. Installations should maintain copies of relevant host nation and prefectural regulations on hazardous materials (GMP).	Determine if copies of the following are maintained: (1)(2)(5)(6)(7) - *Fire Prevention Law.* - *Cabinet Order for the Implementation of the Fire Prevention Law.* - *Cabinet Order Concerning the Regulation of Hazardous Substances.* - *Ordinance on Prevention of Hazards due to Specified Chemical Substances*; Ministry of Labor Ordinance No. 32, 30 September 1972; revised through Ministry of Labor Ordinance No. 26, 1989.
...	...
2-3. Installations that plan to store hazardous substances must submit upon request specific information about the proposed storage area or tank to the governor or the Ministry of Home Affairs (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 6).	Verify that the installation has submitted, if requested to do so, the following information concerning the proposed hazardous substance storage tank and/or hazardous substance area: (1)(2) - name and address of the applicant - category and classification of the item to be installed - location of the item to be installed - category, name of the article, and maximum amount of the hazardous substance - a multiple of the designated amount - location and structure of the facility - method of storage and handling of the hazardous substances - anticipated date of the beginning and ending of construction of the item to be installed. (NOTE: This application should be turned in, along with plans for the location, structure, and associated facilities, and any other forms or information required by ordinance of the Ministry of Home Affairs, through the Defense Facilities Administration Office (DFAO) or the Defense Facilities Administration Bureau (DFAB).)
...	...

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COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
INSIDE STORAGE **2-4.** Installations that store hazardous substances inside of buildings must meet specific requirements (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 10).	Verify that each building containing hazardous substances has the empty lot area surrounding it as specified in Appendix 2-5. (1)(2)(4)(5) Verify that signs are posted indicating that the building is used for the inside storage of hazardous substances. (1)(2)(4)(5) Verify that signs are posted indicating fire prevention requirements as set by the ordinance of the Ministry of Home Affairs. (1)(2)(4)(5) Verify that the building is an independent building used only for the storage of hazardous substances. (1)(2)(4)(5) Verify that the building meets the following structural requirements: (1)(2)(4)(5) - it is one story, less than 6 meters (m) high, and has a raised floor (a floor that is above ground level) - it is less than 1000 m^2 - the walls, structural supports, and floor are fireproof - outside walls have doorways only - the roof is nonflammable and does not have a false ceiling - any windows and doorways are set fireproof doors - only glass with mesh is used - floors are impermeable, sloped, and fitted with a container to collect any spilled hazardous liquids - appropriate natural and/or artificial lighting and ventilation is present - if stored substances have a flashpoint of less than 70 degrees Centigrade (^{0}C), equipment that vents inflammable vapor through the roof must be present - if necessary, air conditioning should be present to keep the building temperature below the flashpoint of the stored hazardous substances.
...	...

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COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
INSIDE TANK STORAGE **2-5.** Specific standards must be met for the proper storage of hazardous substances in tanks inside buildings (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 12).	Verify that the building used for storage is one story. (1)(2) Verify that the tank is situated in a room used exclusively for tank storage. (1)(2) Verify that there is 0.5 m or more between tanks or between a tank and the wall. (1)(2) Verify that the following signs are present: (1)(2)(4)(5) - a sign indicating that a hazardous substance is stored in the tank - a sign listing fire prevention information as stipulated by the ordinance of the Ministry of Home Affairs. Verify that the tank meets the following general requirements: (1)(2) - it is made of steel plate that is at least 3.2 millimeters (mm) thick - its capacity is less than 40 times that of the designated amount - the outside surface of the tank is painted with rust preventive paint. Verify that nonpressure type tanks have a ventilation pipe. (1)(2) Verify that pressure type tanks have a safety device according to the standards set by the Ministry of Home Affairs. (1)(2)(4) Verify that tanks containing liquid hazardous substances are equipped with an indicator to show the amount of substance in the tank. (1)(2) Verify that the opening of the tank: (1)(2)(4) - is positioned to prevent a fire hazard - is connected with a pouring hose or pipe - does not leak - has a valve or a lid. Verify that the tank's water drain pipe is located on the side board of the tank. (1)(2)
...	...

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COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-6. Independent pumps located outside of buildings containing hazardous substance tanks must meet specific criteria (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 12, Section 9-2).	Verify that: (1)(2) - there is an empty area 3 m wide around the pump and its facilities - the pump is fixed on a strong foundation - the pump, its facilities, and its building are made from nonflammable material and light metal boards - the doorway of the pump room has a fireproof door - only glass with mesh is used - the floor of the pump room is impermeable, slopes, and has a liquid gathering container - the pump room is properly lighted and ventilated. (NOTE: Pumps located inside the building containing the storage tank must be situated and maintained in accordance with the ordinance of the Ministry of Home Affairs.)
...	...
2-7. Rooms used for the inside storage of tanks containing hazardous substances must meet specific criteria (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 12, Section 11).	Verify that: (1)(2)(5) - the walls, supports, and floor of the room are fireproof - the beams are made from nonflammable material - outside walls on which fire is likely to spread have doorways only - the roof of the room is made from nonflammable material and does not have a false ceiling - the windows and doorways of the room must be fireproof - only glass with mesh is used - the floor of the room is impervious to liquid hazardous substances, has a proper slope and a gathering container - the doorway is 0.2 m or more high - the room has proper lighting and ventilation.
...	...

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COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SIMPLE TANK STORAGE **2-8.** Installations that have simple storage tanks must meet specific requirements (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 14).	Verify the following: (1)(2) - the tanks are usually located outside - there are three or fewer tanks at the same location (NOTE: This is two or fewer when the tanks contain hazardous substances of the same type.) - there are signs indicating they are simple storage tanks - there are signs indicating fire prevention information as specified in the rdinance of the Ministry of Home Affairs - tanks are fixed on the ground or on a foundation so as to prevent movement - there is an empty space around each tank of not less than 1 m (for outside simple storage tanks) or 0.5 m (for inside simple storage tanks) - the tank has a capacity of 600 liters (L) or less - the tank is made from steel that is less than 3.2 mm thick - the tank is airtight - the exterior surface of the tank has a rust preventive paint applied to it - the tank has a ventilation pipe according to the ordinance of the Ministry of Home Affairs.
...	...
OUTSIDE STORAGE **2-9.** Specific standards must be met for the outside storage of containers of hazardous substances (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 16).	Verify that: (1)(2) - the outside storage area is located in an area that drains well and is not normally wet - the boundaries of the area are clearly marked by fences - empty space is located around the area in accordance with the standards found in Appendix 2-6 - there are signs indicating that the area is an outside storage area - there are signs containing fire prevention information as prescribed in the ordinance of the Ministry of Home Affairs.
..	...

(1) Directorate of Engineering and Housing (DEH) (2).Environmental Coordinator (EC) (3) Preventive Medicine Officer (4) Safety and Health Officer (5) Fire Department (6) Director of Logistics (DOL) (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
FIRE EXTINGUISHING STANDARDS	
2-10. Installations are required to meet specific fire extinguishing standards (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 20).	Verify that the standards in Appendix 2-7 are met. (1)(2)(4)(5)
..	...
FIRE ALARM	
2-11. Specified buildings or areas are required to have a fire alarm (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 21).	Verify that any building or area containing hazardous substances in quantities ten or more times the designated amount has a fire alarm. (1)(2)(4)(5)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (4) Safety and Health Officer (5) Fire Department (6) Director of Logistics (DOL) (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
STORAGE AND HANDLING	
2-12. Installations must meet specific storage and handling requirements for hazardous substances (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 24; *Poisonous/Harmful Substances Regulation Law*, Article 11).	Verify that only hazardous substances named in the application for storage are actually stored. (1)(2)(4) Verify that hazardous substances are not stored in excess of the designated amount stated in the application for storage. (1)(2)(4) Verify that only authorized personnel have access to the storage area. (1)(2)(4) Verify that gathering containers for liquid hazardous substances are emptied regularly to prevent overflow. (1)(2)(4) Verify that dust and/or residue of hazardous substances is discharged properly once per day. (1)(2)(4) Verify that proper temperature, humidity, and/or pressure is maintained during storage and/or handling. (1)(2)(4) Verify that hazardous substances are handled in a manner that prevents leaking, overflowing, or splashing. (1)(2)(4) Verify that proper measures are taken to prevent unwanted mixing of hazardous substances during handling. (1)(2)(4) Verify that during the repair of any equipment related to the handling or storage of hazardous substances, the substance is stored safely away from the area. (1)(2)(4) Verify that containers used for storing and handling hazardous substances are not damaged or corroded. (1)(2)(4) Verify that containers are handled with care. (1)(2)(4)
...	...
2-13. Installations are required to have a specialist to manage poisonous or harmful substances to prevent injury to public sanitation (*Poisonous/Harmful Substances Regulation Law*, Article 7).	Verify that the person in charge of poisonous or harmful substances is properly trained. (2)(3)(4)
...	...

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COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-14. Installations are required to follow specific standards for the handling and storage of specific hazardous substances (*Cabinet Order Concerning the Regulation of Hazardous Substances*, Article 25).	Verify that first category hazardous substances (oxide solids): (1)(2)(4)(5) - are not mixed with inflammable substances - are not placed close to substances with which they will react - are not heated or dropped. Verify that peroxides of alkaline metal do not touch water. (1)(2)(4)(5) Verify that second category hazardous substances (combustible solids): (1)(2)(4)(5) - are not mixed with an oxidizer - are not placed close to flames or sparking objects - are not exposed to high temperatures. Verify that iron, metal, and magnesium dusts do not touch water or acid. (1)(2)(4)(5) Verify that third category hazardous substances (spontaneously combustible and water-reactive substances): (1)(2)(4)(5) - are not placed close to a flame or sparking object - are not exposed to high temperatures - are not heated or exposed to air - if reactants, they are not exposed to water. Verify that fourth category hazardous substances (water-soluble and non-water-soluble liquids): (1)(2)(4)(5) - are not placed near flame, sparking objects, or high temperatures - are not heated or allowed to vaporize. Verify that fifth category hazardous substances (self-reactive substances): (1)(2)(4)(5) - are not placed close to flames, sparking objects, or high temperatures - are not heated or jolted. Verify that sixth category hazardous substances: (1)(2)(4)(5) - are not mixed with inflammable substances - are not placed close to substances that will stimulate reactions - are not heated. (NOTE: The cabinet order does not explicitly define sixth category hazardous substances, though nitric acid and hydrogen peroxide appear to be typical examples.)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (4) Safety and Heal[illegible] Officer (5) Fire Department (6) Director of Logistics (DOL) (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SIGNS	
2-15. Installations are required to have the proper signs on containers of poisonous and harmful substances (*Poisonous/ Harmful Substance Regulation Law*, Article 12).	Verify that containers of poisonous substances are marked accordingly with white letters on a red background. (1)(2)(4) Verify that containers of harmful substances are marked accordingly with red letters on a white background. (1)(2)(4)
...	...
WORKER PROTECTION	
2-16. Installations with workers who handle chlorine or substances that contain chlorine in excess of 1 percent by weight must monitor the health of the workers at 6-month (mo) intervals (*Ordinance on Prevention of Hazards due to Specified Chemical Substances*).	Discuss with Preventive Medicine (PVNTMED) whether those who routinely work with chlorine are monitored at 6-mo intervals for the following: (2)(3) - work history - previous respiratory ailments from chlorine - previous ophthalmological symptoms from chlorine - presences of symptoms such as coughs, congestion, upper respiratory tract irritation, tearing, abnormalities of corneas, vision disturbance, dental changes - investigation of working conditions - physical checking of the chest or direct checking of the chest with roentgenography - pulmonary ventilation function test when symptoms are noted in respiratory organs.
...	...
2-17. Installations with workers who handle benzene must monitor the health of the workers at 6-mo intervals (*Ordinance on Prevention of Hazards due to Specified Chemical Substances*).	Discuss with PVNTMED whether those who routinely work with benzene are monitored at 6-mo intervals for the following: (2)(3) - work history - previous symptoms or ailments such as heaviness in the head, headache, dizziness, palpitations, malaise, paresthesia in upper and lower extremities, poor appetite, bleeding tendency, etc., resulting from benzene - current ailments including heaviness in the head, headache, dizziness, malaise, paresthesia in upper and lower extremities, poor appetite - blood tests to determine total specific gravity and erythrocytic systems covering red blood cell counts - checking of white blood cells.
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (4) Safety and Health Officer (5) Fire Department (6) Director of Logistics (DOL) (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
RELEASES **2-18.** Installations are required to submit form USFJ-DJ-49 *Pollution Incident Report* under specified circumstances (USFJ Policy Letter 85-2).	Verify that the installation submits form USFJ-DJ-49 *Pollution Incident Report* in the event of: (1)(2) - any offbase spill - any onbase spill of a toxic or hazardous material - any onbase spill of POL over 110 gallons (g) - any onbase spill that threatens the host nation's drinking water.

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (4) Safety and Heal[illegible] Officer (5) Fire Department (6) Director of Logistics (DOL) (7) Fuels Management Officer (DOL/DEH)

Appendix 2-1

Designated Amounts for Hazardous Materials Storage

Authorized Storage Quantities for Hazardous Substances

Category	Name of Substance	Characteristics	Designated Quantity
1		Type 1 Oxide Solid	50 kg
		Type 2 Oxide Solid	300 kg
		Type 3 Oxide Solid	1000 kg
2	Phosphorus sulfur		100 kg
	Red sulfur		100 kg
	Sulfur		100 kg
		Type 1 Combustibility	100 kg
	Iron		500 kg
		Type 2 Combustibility	500 kg
	Flammable		1000 kg
3	Potassium		10 kg
	Sodium		10 kg
	Alkyl aluminum		10 kg
	Alkyl lithium		10 kg
		Type 1 Spontaneous ignition	10 kg
	Yellow Phosphorus		20 kg
		Type 2 Spontaneous ignition	50 kg
		Type 3 Spontaneous ignition	300 kg
4	Special flammable		50 L
	Petroleum type 1	nonaqueous	200 L
		aqueous	400 L
	Alcohol		400 L
	Petroleum type 2	nonaqueous	1000 L
		aqueous	2000 L
	Petroleum type 3	nonaqueous	2000 L
		aqueous	4000 L
	Petroleum type 4		6000 L
	Animal and Vegetable oil		10,000 L

Authorized Storage Quantities for Hazardous Substances

Category	Name of Substance	Characteristics	Designated Quantity
5		Type 1 Self-reactive Type 2 Self-reactive	10 kg 100 kg
6			

(NOTE: Definitions of the various subtypes of characteristics were not available, nor were definitions of the subtypes of petroleum.)

(NOTE: Category 6 substances are not defined, though nitric acid and hydrogen peroxide appear to be typical examples.)

Appendix 2-2

List of Harmful Substances

1. acrylnitryl
2. acrolein
3. aniline
4. ammonia
5. 2-isopropyl-4-methylpyrimidyl-6-diethylthiophosphate (common name - Diazinon)
6. ethyl-N-(diethyldihiophosphorylacetyl) -N-methylcarbamate
7. ethylenechlorohydrin
8. hydrogen chloride
9. mercurous chloride
10. hydrogen peroxide
11. sodium peroxide
12. bromine peroxide
13. potassium
14. alloy of potassium and sodium
15. cresol
16. chloroethyl
17. chlorosulfonic acid
18. chloropicrin
19. chloromethyl
20. chloroform
21. silicofluoric acid
22. sodium cyanate
23. diethyl-4-chlorophenylmercaptomethyldithiophosphate
24. diethyl-(2,4 -dichlorophenyl) -thiophosphate
25. diethyl-2,5-dichlorophenylmercaptomethyldithiophosphate
26. carbon tetrachloride
27. cycloheximide
28. dichloro acetic acid
29. dichlorobutene
30. 2,3-di-(diethyldithiophosphoro) -paradioxane
31. 2,4-dinitro-6-cyclohexylphenol
32. 2,4-dinitro-6-(1-methylpropyl) -phenylacetate
33. 2,4-dinitro-6-methylpropylphenoldimethylacrylate
34. 2,2-dipyridirium-1 1-ethylenedibromide
35. 1,2-dibromoethane (common name - EDB)
36. dibromochloropropane (common name - DBCP)
37. 3 5-dibromo-4-hydroxy-4-nitroazobenzene
38. dimethylethylsulfinylisopropylthiophosphate
39. dimethylethylmercaptoethylditionphosphate (common name - thiomethone)
40. dimethyl-2,2-dichlorovinylphosphate (common name - DDVP)
41. dimethylditiophosphorylphenyl
42. dimethyldibromodichloroethylphosphate
43. dimethylphthalylimidemethylditiophosphate
44. dimethylmethylcarbamylethylthioethylthiophosphate
45. dimethyl-(N-methylcarbamylmethyl) -dithiophosphate (common name - Dimethoate)
46. dimethyl-4-methylmercapto-3-methylphenylthiophosphate

47. dimethyl sulfuric acid
48. bichromic acid
49. oxalic acid
50. bromine
51. nitric acid
52. thallium nitrate
53. potassium hydroxide
54. sodium hydroxide
55. sulfonal
56. tetraethylmethylenebisdithiophosphate
57. triethanolammonium-2,4-dinitro-6-(1-methylpropyl) -phenolate
58. trichloro acetic acid
59. trichlorohydroxyethyldimethylphosphonate
60. trithiocycloheptadiene-3,4,6,7-tetranitryl
61. toluidine
62. sodium
63. nitrobenzene
64. carbon disulfide
65. fuming sulfuric acid
66. paratoluylene diamine
67. paraphenylene diamine
68. picric acid
69. hydroxylamine
70. phenol
71. blasticidin S
72. bromoethyl
73. hydrogen bromide
74. bromomethyl
75. hexachloroepoxyoctahydroandexodimethanonaphthalene (common name - Dieldrin)
76. 1,2,3,4,5,6-hexachlorocyclohexane (common name - Lindane)
77. hexachlorohexahydroexoanddimethanonaphthalene (common name - Aldrin)
78. betanaphthol
79. 1,4,5,6,7-pentachloro-3a,4,7,7a-tetrahydro-4,7-(8, 8-dichloromethano) -indene (common name - Heptachlor)
80. pentachlorophenol (c.n.- PCP)
81. formaldehyde
82. chromic acid anhydride
83. methanol
84. methylsulfonal
85. N-methyl-1-naphthylcarbamate
86. monochlor acetic acid
87. hydrogen iodide
88. iodine
89. sulfuric acid
90. thallium sulfate
91. zinc phosphide
92. ethyl thiocyanoacetate
93. rotenone
94. others-products containing those listed above and those listed in the cabinet order.

Appendix 2-3

List of Poisonous Substances

1. ethylparanitrophenylthionobenzenephosphonate (common name - EPN)
2. white phosphorous
3. octachlorotetrahydromethanophthalein
4. octamethylpyrophosphoramide (common name - Schradan)
5. curare
6. tetraalkyl lead
7. hydrogen cyanide
8. sodium cyanide
9. diethylparanitrophenylthiophosphate (common name - Parathion)
10. dinitrocresol
11. 2 4-dinitro-6-(1-methylpropyl) -phenol
12. dimethylethylmercaptoethylthiophosphate (common name - Methyldemeton)
13. dimethyl-(diethylamid-1-chlorochlotonyl) -phosphate
14. dimethlparanitrophenylthiophosphate (common name - Methylparathion)
15. mercury
16. selenium
17. thiosemicarbazide
18. tetraethylpyrophosphate (common name - TEPP)
19. nicotine
20. nickel carbonyl
21. arsenic
22. hydrogen fluoride
23. hexachloroepoxyoctahydroendo, endodimethanonaphthalene (common name - Endrin)
24. hexachlorohexahydromethanobenzodioxathiepineoxide
25. monofluor acetic acid
26. monofluoro acetamide
27. phosphorus sulfide
28. others - products containing those listed above and those listed in the cabinet order.

Appendix 2-4

List of Specific Poisonous Substances

1. octamethylpyrophosphoramide
2. tetraalkyl lead
3. diethylparanitrophenylthiophosphate
4. dimethylethylmercaptoethylthiophosphate
5. dimethyl-(diethylamid-1-chlorochlotonyl) -phosphate
6. dimethylparanitrophenylthiophosphate
7. tetraethylpyrophosphate
8. monofluoro acetic acid
9. monofluoro acetamide
10. others-products containing those listed above and those listed in the cabinet order.

Appendix 2-5

Storage Building Requirements

(Source: Article 10, Cabinet Order Concerning the Regulation of Hazardous Substances)

Buildings must be surrounded by empty lots in accordance with the following table:

Classification	Fireproof Building	Not Fireproof Building
The multiple of the designated amount[1] is 5 or less	-	0.5 m or more
The multiple of the designated amount is more than 5 but 10 or less	1 m or more	1.5 m or more
The multiple of the designated amount is more than 10 but 20 or less	2 m or more	3 m or more
The multiple of the designated amount is more than 20 but 50 or less	3 m or more	5 m or more
The multiple of the designated amount is more than 50 but 200 or less	5 m or more	10 m or more
The multiple of the designated amount is more than 200	10 m or more	15 m or more

[1] *designated amounts* are listed in Appendix 2-1.

Appendix 2-6

Standards for Outside Storage

(Source: Article 16, Cabinet Order Concerning the Regulation of Hazardous Substances)

Empty lots must enclose fences in accordance with the following table:

Classifications	Width of the Empty Lots
The multiple of the designated amount[1] is 10 or less	3 m or more
The multiple of the designated amount is more than 10 but 20 or less	6 m or more
The multiple of the designated amount is more than 20 but 50 or less	10 m or more
The multiple of the designated amount is more than 50 but 200 or less	20 m or more
The multiple of the designated amount is more than 200	30 m or more

[1] *designated amounts* are listed in Appendix 2-1.

Appendix 2-7

Fire Extinguishing Standards

(Cabinet Order Concerning the Regulation of Hazardous Substances)

Classification of Fire Extinguishing Equipment		Classification of Object						
		Building or other structure	Electric facilities	Hazardous substances category 1		Hazardous substances category 2		
				peroxides of alkaline metal	others	iron/metal dust or magnesium	inflamm. solid	others
1.	Fire Hydrant inside or outside building	•			•		•	•
2.	Sprinkler system	•			•		•	•
3.	Vapor/water spray extinguishing system	•	•		•		•	•
	Foam extinguishing system	•			•		•	•
	Carbon dioxide extinguishing system		•			•		
	Halon extinguishing system		•			•		
	Dry chemical extinguishing systems: --phosphate	•	•		•		•	•
	--hydrogen carbonate		•	•		•	•	
	--others			•		•		
4/5.	Bar water emission system	•			•		•	•
	Fog water emissions system	•	•		•		•	•
	Strengthened bar liquid emission system	•			•		•	•
	Strengthened fog liquid emission system	•	•		•		•	•
	Foam extinguisher	•			•		•	•
	Carbon dioxide extinguisher		•				•	
	Halon extinguisher		•				•	
	Dry chemical extinguishing systems: --phosphate	•	•		•		•	•
	--hydrogen carbonate		•	•		•		•
	--others			•		•		
5.	Water bucket or tank	•			•		•	•
	Dry sand			•	•	•	•	•
	Expansion type of vermiculite or of perlite			•	•	•	•	•

Appendix 2-7 (continued)

Classification of Fire Extinguishing Equipment		Classification of Object				
		Hazardous substances category 3		Hazardous substances category 4	Hazardous substances category 5	Hazardous substances category 6
		Water reactive hazardous substances	Others			
1.	Fire Hydrant inside or outside building		•		•	•
2.	Sprinkler system		•		•	•
3.	Vapor/water spray extinguishing system		•	•	•	•
	Foam extinguishing system		•	•	•	•
	Carbon dioxide extinguishing system			•		
	Halon extinguishing system			•		
	Dry chemical extinguishing systems: --phosphate			•		•
	--hydrogen carbonate	•		•		
	--others					
4/5.	Bar water emission system		•		•	•
	Fog water emissions system		•		•	•
	Strengthened bar liquid emission system		•	•	•	•
	Strengthened fog liquid emission system		•	•	•	•
	Foam extinguisher		•	•	•	•
	Carbon dioxide extinguisher			•		
	Halon extinguisher			•		
	Dry chemical extinguishing systems: --phosphate			•		•
	--hydrogen carbonate	•		•		
	--others	•				
5.	Water bucket or tank		•		•	•
	Dry sand	•	•	•	•	•
	Expansion type of vermiculite or of perlite	•	•	•	•	•

(NOTE: Indoor and outdoor storage areas (including tank storage areas) that store substances which are difficult to extinguish when ignited must have firefighting equipment from groups 4 and 5. Indoor and outdoor storage areas that store substances which are extremely difficult to extinguish when ignited must have equipment from groups 1, 2, or 3 and from groups 4 and 5. The available material did not provide a determination of which substances are considered *difficult* and which are *extremely difficult* to extinguish.)

INSTALLATION:	COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

(2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (4) Safety and Health Officer (5) Fire Department (6) Director of Logistics (DOL) (7) Fuels Management Officer (DOL/DEH)

Section 3

Hazardous Waste Management

Section 3

HAZARDOUS WASTE MANAGEMENT

A. Applicability

This protocol applies to U.S. Armed Forces installations that generate hazardous wastes.

B. Japanese Legislation and Regulations

- *Waste Disposal and Public Cleansing Law* (Law No. 137 of 1970 as amended through Law No. 43 of 1983) is the main law concerning wastes. Hazardous wastes form a part of the focus of the law, but the law's true focus is broad; both hazardous and regular wastes are addressed. Its main purpose is the preservation of the living environment and the improvement of public health through the appropriate disposal of wastes and conservation of a clean environment. The law lists the duties of generators, collectors, transporters, and disposers of wastes, as well as the duties of prefectural and municipal governments with regard to proper reporting and inspection requirements concerning wastes.

- *Cabinet Order for Implementation of the Waste Disposal and Public Cleansing Law* (Cabinet Order No. 300 of 23 September 1971 as amended through Cabinet Order No. 336 of 1986) provides the detailed definitions and standards mentioned in the basic law. These include standards for the collection, transportation, and disposal of domestic and industrial wastes, as well as standards for entrusting transport and disposal of industrial wastes.

- *Regulation for Implementation of the Waste Disposal and Public Cleansing Law* (No. 35 of 1971 - No. 40 of 1989; Ministry of Health and Welfare Ordinance).

C. Prefectural Regulations

At present, no information is available concerning specific prefectural regulations for hazardous wastes. The following are actions that prefectural and local governments can take concerning hazardous waste management, based on provisions in the national laws and regulations.

- Duties of Government and Municipalities - municipalities are obligated to produce concepts of cleaning and to execute waste treatment. Prefectural governments are bound to give technical advice to municipalities for carrying out their duties and to "take hold of the conditions of industrial wastes in the respective prefecture along with provisions of necessary measures."

- Disposal Plan - the prefectural governor is responsible for promulgating a plan on industrial wastes disposal. This plan includes the establishment of the industrial waste treatment plant, transport of industrial wastes, determining the place for disposal of industrial wastes, and other matters related to the disposal of industrial wastes. Advice must be sought from the Prefectural Council on Pollution Control under the *Basic Law for Environmental Pollution Control* (Law No. 132 of 1967 as amended).

- Disposal by the Prefectural Governments and Municipalities - since these governmental bodies are responsible for the proper handling of waste materials, they are entitled both to receive compensation for expenses incurred by the establishment of public industrial wastes disposal plants and its associated costs, and to have the authority to deny permission to private collectors, transporters, and storers of industrial wastes to carry out their activities. This power is to be exercised primarily when private parties do not conduct their business in accordance with applicable health and welfare regulations.

- Treatment by Enterpriser - when a prefectural governor determines that the transport or disposal of industrial wastes does not comply with the applicable standards as set out in the cabinet order, or if the storage of industrial wastes is not in accordance with standards established by the *Ordinance of the Ministry of Health and Welfare*, the governor can order a change in the transport, disposal, or method of storage, and can provide other necessary means for the proper handling of these wastes.

D. Key Compliance Definitions

The following definitions were obtained from the laws and regulations cited previously.

- *Enterpriser* - a public or private entity who generates industrial waste.

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Hazardous Substances* - defined by the *Cabinet Order for Implementation of the Waste Disposal and Public Cleansing Law* and include the following items: mercury or its compounds, cadmium or its compounds, lead or its compounds, organic phosphorus compounds, hexavalent chromium compounds, arsenic or its compounds, cyanide compounds, and polychlorinated biphenyls (PCBs).

- *Industrial Wastes* - defined as:
  - waste pieces of rubber
  - waste metal
  - waste pieces of glass and ceramics
  - slags
  - pieces of broken concrete produced in the removal of structures and other similar wastes
  - soot and dust produced in those smoke and soot generating facilities provided in Article 2, paragraph 2 of the *Air Pollution Control Law* (Law No. 97 of 1968) and in incineration facilities for sludge, waste oil, waste acid, waste alkali, and waste plastics
  - substances processed from cinders, sludge, waste oil, waste acid, waste alkali, waste plastics, and wastes which, for disposal purposes, do not fall under the types of wastes listed previously.

- *Undertaker of Industrial Wastes Disposal* - a person who undertakes collection, transport, or disposal of industrial wastes as a business.

- *Wastes* - refuse, bulky refuse, ashes, sludge, human excretion, waste oil, waste acid and alkali, carcasses, and other filthy and undesirable material in solid or liquid state (excluding radioactive wastes).

HAZARDOUS WASTE MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	3-1 through 3-3	(1)(2)
Industrial Waste Generation/Disposal/ Transportation	3-4 through 3-8	(1)(2)(6)(18)(19)(20)(23)
Waste Acid and Alkali Disposal	3-9	(1)(2)(18)

***CONTACT/LOCATION CODE:**

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator
(6) Director of Logistics (DOL)
(18) TSDF Operators (DEH, DOL, DRMO)
(19) Shop Activity Supervisor
(20) Director of Contracting (DOC)
(23) Defense Reutilization and Marketing Office (DRMO)

COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
3-1. Determine actions or changes since previous evaluation of hazardous waste management (GMP).	Examine a copy of the previous review to determine if noncompliance issues have been resolved. (1)(2)
...	...
3-2. Installations should maintain copies of all relevant host nation regulations (GMP).	Determine if copies of the following are maintained at the installation: (1)(2) - *Waste Disposal and Public Cleansing Law* (Law No. 137 of 1970, as amended). - *Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law* (Cabinet Order No. 300 of 23 September 1971 as amended through Cabinet Order No. 336 of 1986). - *Regulation for the Implementation of the Waste Disposal and Public Cleansing Law* (No. 35 of 1971 - No. 40 of 1989; Ministry of Health and Welfare Ordinance).
...	...
3-3. Installations should be aware of host nation and prefectural standards regarding the collection, transportation, and disposal of industrial waste (GMP).	Verify that the installation is aware of host nation and prefectural standards concerning the collection, transportation, and disposal of industrial waste. (1)(2) (NOTE: The *Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law* identifies the prefectural government as one of the regulating authorities for the collection, transportation, and disposal of industrial waste.)
...	...
INDUSTRIAL WASTE GENERATION/ DISPOSAL/ TRANSPORTATION	
3-4. Installations that generate industrial wastes are required to appoint a person to manage its disposal (*Waste Disposal and Public Cleansing Law*, Article 12, Section 5(1)).	Determine if the installation generates industrial wastes. (1)(2) Verify that a person has been appointed to manage its disposal. (1)(2)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (6) Director of Logistics (DOL) (18) TSDF Operators (DEH, DOL, DRMO) (19) Shop Activity Supervisor (20) Director of Contracting (DOC) (23) Defense Reutilization and Marketing Office (DRMO)

COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-5. Industrial waste must be stored in a manner that prevents scattering, leaking, contamination of the ground, or the breeding of harmful animals and insects (*Regulation for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 8, Section 1 and 2).	Verify that industrial waste is stored so as to prevent scattering, leaking, ground contamination, and the breeding of harmful animals and insects. (2)(18)(19)(23)
...	...
3-6. Installations that collect, transport, or dispose of industrial waste are required to obtain permission from the prefectural governor (*Waste Disposal and Public Cleansing Law*, Article 14).	Determine if the installation collects, transports, or disposes of its own industrial waste. (1)(2)(6)(23) Verify that permission has been obtained from the prefectural governor. (1)
...	...
3-7. Installations that use contractors for the disposal of industrial waste are required to ensure that they are properly qualified and licensed (*Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 6-2).	Determine if the installation uses host nation contractors for waste disposal. (1)(2)(20)(23) Review waste disposal contracts. (2)(20)(23) Verify that the contractor is qualified and licensed to transport and dispose of industrial waste. (2)(20)(23) (NOTE: In Japan, contracting for disposal of hazardous wastes is subject to the approval of the Major Army Command Environmental Protection Committee (MACOM EPC).)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (6) Director of Logistics (DOL) (18) TSDF Operators (DEH, DOL, DRMO) (19) Shop Activity Supervisor (20) Director of Contracting (DOC) (23) Defense Reutilization and Marketing Office (DRMO)

COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-8. Installations are required to meet specific standards for the landfill of industrial waste (*Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 6, Section 1).	Verify that landfills are enclosed and marked as industrial waste landfills. (1)(2)(18) (NOTE: If the industrial waste contains hazardous substances (see definitions), the landfill must be marked as a disposal site for dangerous industrial wastes.) Verify that the landfill is shut off from public waters and underground water. (1)(2)(18) Verify that sludges are incinerated or their water content is reduced to 85 percent or less prior to landfilling. (1)(2)(18) (NOTE: This does not include reclamation on water surfaces.) Verify that waste oil (excluding tar, pitches, and waste PCBs) are incinerated prior to landfilling. (1)(2)(18) Verify that waste plastics are crushed, cut into pieces (maximum diameter 15 centimeters (cm)), melted, or incinerated prior to landfilling. (1)(2)(18) Verify that waste rubber is crushed, cut into pieces (maximum diameter 15 cm), or incinerated prior to landfilling. (1)(2)(18) Verify that soot and dust is packaged to prevent scattering prior to landfilling. (1)(2)(18) (NOTE: This includes soot and dust from smoke and soot generating facilities and incineration facilities for sludge, waste oil, waste acid, waste alkali, and waste plastics.)
...	...
WASTE ACID AND ALKALI DISPOSAL	
3-9. Underground burial of waste acid and alkali is prohibited (*Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 6, Section 2).	Verify that installations are not burying waste acid and alkali. (1)(2)(18)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (6) Director of Logistics (DOL) (18) TSDF Operators (DEH, DOL, DRMO) (19) Shop Activity Supervisor (20) Director of Contracting (DOC) (23) Defense Reutilization and Marketing Office (DRMO)

INSTALLATION:	COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (6) Director of Logistics (DOL) (18) TSDF Operators (DEH, DOL, DRMO) (19) Shop Activity Supervisor (20) Director of Contracting (DOC) (23) Defense Reutilization and Marketing Office (DRMO)

Section 4

Natural and Cultural Resources Management

Section 4

NATURAL AND CULTURAL RESOURCES MANAGEMENT

A. Applicability

This protocol applies to any U.S. Armed Forces installation that encompasses any designated conservation or protection area.

B. Japanese Legislation and Regulations

- *Basic Policy on Conservation of the Natural Environment* (Prime Minister's Office Notification No. 30 of 6 November 1973) is a document that serves as a mandate and justification for the protection and conservation of the natural environment. It outlines several fundamental policy directives for the rational use and conservation of nature and its bounty.

- *Nature Conservation Law* (Law No. 85 of 1972 as amended through Law No. 58 of 1987) is designed to comprehensively promote the proper conservation of the natural environment for the present and future health and well being of the public. Private property rights are to be balanced with the public interest in conserving and protecting the nation's natural resources. The state has the responsibility of preparing conservation plans, conducting scientific studies in connection with those plans, promoting the public's understanding of the necessity for conserving the natural environment, and considering the effect on the natural environment when making and carrying out plans for regional development, public works, and other public projects.

- *Natural Parks Law* (Law No. 161 of 1967 as amended through Law No. 87 of 1978) provides for the protection of places of scenic beauty to promote the "health, recreation, and culture of the people." The law establishes the nation's park system, including provisions for national parks, quasi-national parks, and prefectural natural parks. These provisions include designations for special land and marine park areas that are to be accorded special protection due to their unqualified or unique natural attributes.

- *Law of Cultural Resource Protection* (Law No. 214 of 1950 as amended through Law No. 78 of 1983) is aimed at preserving cultural property in order to "contribute to the advancement of the cultures of the world." It identifies different types of cultural property and outlines ways to handle them.

- *Wildlife Protection and Hunting Law* (Law No. 32 of 1918) is designed to protect and propagate wildlife, control harmful wildlife, and prevent the dangers associated with hunting by executing wildlife protection projects and hunting restrictions so as to improve the living environment and promote agriculture, forestry, and fisheries.

- *Forestry Law* (Law No. 249 of 1951, as amended in 1989) establishes a comprehensive forestry plan for the purpose of conserving, cultivating, and increasing the productive capacity of the nation's forests, so as to contribute to economic development and the preservation of national land.

C. Prefectural Regulations

At present, no information relating to specific prefectural regulations for natural and cultural resources is available. Chapter VI of the *Nature Conservation Law* (Law No. 85 of 1972 as amended through Law No. 58 of 1987) authorizes the establishment of prefectural nature conservation areas and prefectural nature conservation councils.

- Designation of Prefectural Nature Conservation Areas - prefectures are allowed to designate certain areas within the prefecture where the natural environment is equivalent to zones within nature conservation areas and where there is a special need for conservation of the environment. The prefecture may establish wild plant and animal protection districts within special areas of the nature conservation areas, consult with the Director General of the Environment Agency if it intends to designate or expand such areas, and present a conservation plan for those areas, and may be required to prepare reports concerning such areas.

- Prefectural Nature Conservation Council - these councils have the responsibility of discussing important conservation matters within the prefecture.

D. Key Compliance Definitions

The following definitions were taken from the laws, regulations, and policy materials cited previously.

- *Conservation Plan for a Nature Conservation Area* - plan outlining the regulations or facilities necessary to conserve the natural environment within a nature conservation area. This plan addresses such matters as which characteristics of the natural environment should be conserved, the designation of an area of land

to be specially conserved (special area) or sea area to be specially conserved (special marine area), regulatory matters for conserving the natural environment within an area, and matters relating to facilities designed for conserving the natural environment within an area.

- *Cultural Property* - includes the following:
  - *Cultural property with shape* - buildings, paintings, sculptures, handicrafts, calligraphies and other items which have a definite shape and are of historic or artistic value. This term also includes archaeological and historical items having academic value.
  - *Cultural property without shape* - plays, music, craft techniques, and other intangible items that have historical or artistic value.
  - *Folk cultural property* - manners and customs concerning food, clothing, shelter, subsistence, annual events, and similar items.
  - *Archaeological or historical sites* - sites with historical or academic value such as shell midden, ancient tombs, sites of towns, fortifications or castles, ancient living areas, and similar items.
  - *Valuable traditional building* - buildings that are unified with their surroundings to form a historical scenic beauty.

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Nature Conservation Areas* - those areas selected by the Director General of the Environment Agency (other than those classified as wilderness areas) which fall under any of the following categories:
  - forests or plains largely covered with alpine plants or subalpine plants (including land that is an integral part of the natural environment), of a size exceeding that stipulated by cabinet order
  - forest largely composed of excellent natural groves (including land that is an integral part of the natural environment), of a size exceeding that stipulated by cabinet order
  - land with unique topography or geology, or from which a unique natural phenomenon can be seen, that is of a size exceeding that stipulated by cabinet order, including land that is an integral part of the natural environment
  - seashores, lakes, marshes, damp fields, or rivers where the natural environment, including animals and plants within these areas, is maintained in an excellent condition, and which are of a size exceeding that stipulated by cabinet order
  - sea areas where the natural environment, including tropical fish, coral, seaweed, or other animals or plants within these areas, is maintained in an excellent condition, and which are of a size exceeding that stipulated by cabinet order

- land with native plants, wild animal habitats, and other areas as stipulated by cabinet order, where the natural environment is maintained to an extent equivalent to that within the areas noted in the preceding items, and is of a size exceeding that stipulated by cabinet order.

- *Nature Conservation Council* - a body within the Environment Agency charged with investigating environmental matters under its authority pursuant to the *Nature Conservation Law*, the *Natural Parks Law*, and other laws relating to the protection and conservation of the natural environment.

- *Ordinary Area* - an area that exists within an area that is not included in a special area or a special marine area, but rather falls within the zone of a nature conservation area. Persons performing actions in these areas can do so only under certain provisions. Certain exemptions to the rules apply, such as for actions taken as an emergency measure to cope with an extraordinary situation or actions pertaining to the protection and enhancement of the area.

- *Prefectural Nature Conservation Area* - zones where the natural environment is equivalent to that of nature conservation areas and where there is a special need for conservation of the natural environment in light of natural and social conditions in the surrounding areas. Prefectures may designate special areas within the prefectural nature conservation areas in accordance with their regulations for the purpose of conserving the natural environment within these areas, and may provide the necessary regulations for actions taken within the areas, provided that consideration be given to securing the livelihoods of the area residents who are engaged in agriculture, forestry, fishery, etc., and enhancing the welfare of these people.

- *Prefecture Nature Conservation Council* - this body investigates and discusses matters relating to conservation of the natural environment of the prefecture in which it is based in response to inquiries from the prefecture. It also investigates and discusses those matters which fall under its authority under the provisions of the *Wildlife Protection and Hunting Law* (Law No. 32 of 4 April 1918 as amended through Law No. 83 of 1983).

- *Restricted Entry District* - a zone within a wilderness area to which limited access is allowed, based upon the position of the Director General of the Environment Agency that such a district is necessary for conserving the natural environment within the wilderness area. This district is to be based on the conservation plan relating to the wilderness area. No person shall enter the district unless certain conditions apply, such as when the person has a permit, emergency measures must be taken within the district, conservation work or management tasks must be performed within the district, or when the Director General has granted a special permit for *unavoidable cause*.

- *Wild Animal and Plant Protection District* - an area within the special area within which the Director General of the Environment Agency determines there to be a special need for the protection of specific wild animals and plants. A district may be established for each kind of wild animal or plant to be protected on the basis of the conservation plan for a nature conservation area.

- *Wilderness Area* - an area designated by the Director General of the Environment Agency after consultation with the public and other government organizations. This includes some areas upon which the natural environment has maintained an ecological stability without being influenced by human activities, areas of a size exceeding that stipulated in the relevant cabinet order, and areas that are owned by the State or by local public bodies (excluding reserved forests so designated under the *Forests Law* (Law No. 249 of 1951).

- *Wildlife Protection Area* - an area in which the capture and collection of designated animals and plants is prohibited except by permission of the Director General of the Environment Agency or the governor of the concerned prefecture.

NATURAL AND CULTURAL RESOURCES MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
Natural Resources	4-1 through 4-7	(1)(2)(15)(16)
Cultural Resources	4-8 through 4-11	(1)(2)

*CONTACT/LOCATION CODE:

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(15) Land Management Officer (DEH)
(16) Building and Grounds Division (DEH)

COMPLIANCE CATEGORY: NATURAL AND CULTURAL RESOURCES MANAGEMENT Japan	
REGULATORY REQUIREMENTS;	**REVIEWER CHECKS:**
NATURAL RESOURCES	
4-1. Determine actions or changes since previous reviews of natural resources management (GMP).	Examine copies of previous natural resources reviews to determine if noncompliance issues have been resolved. (1)(2)
...	...
4-2. Installations should maintain copies of all relevant host nation regulations on natural resources (GMP).	Determine if copies of the following laws applicable to the installation are maintained on the installation: (1)(2) - *Basic Policy on Conservation of the Natural Environs.* - *Nature Conservation Law.* - *Natural Parks Law.* - *Forestry Law.* - *Wildlife Protection and Hunting Law.*
...	...
4-3. Installations are responsible for conservation of the natural environment and are required to cooperate with host nation and prefectural public bodies in their implementation of conservation plans (*Nature Conservation Law*, Article 10).	Verify that the installation is cooperating with host nation and prefectural authorities about conservation of the environment. (1)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (15) Land Management Officer (DEH) (16) Building and Grounds Division (DEH)

COMPLIANCE CATEGORY: NATURAL AND CULTURAL RESOURCES MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
4-4. The installation must not perform specified acts within the boundaries of a wilderness area (*Nature Conservation Law*, Article 17, Section 1).	Determine if the installation includes any wilderness area within its boundaries. (1)(15) Verify that none of the following acts are performed within the wilderness area: (15)(16) - constructing, rebuilding, or expanding a building or other structure - making residential land, clearing land, or otherwise changing the topography of the land - exploiting minerals or extracting soil or stone - filling in the water surface or draining land - causing an increase or decrease in the water level of rivers, lakes, or marshes, or in the volume of their water - filling or damaging trees or bamboo - collecting plants (other than trees and bamboo), or fallen leaves or branches - planting trees or bamboo - capturing animals or collecting their eggs - grazing cattle - starting kindling or making a fire - piling or storing things in the open air - using horses, vehicles, or power-driven boats, or landing an airplane. (NOTE: This provision will not apply in cases where the Director General of the Environment Agency has specifically granted a permit for scientific research or otherwise for the public good, or where the act is performed as an emergency measure to cope with an extraordinary situation.)
...	...
4-5. The Director General of the Environment Agency may designate areas as nature conservation areas (*Nature Conservation Law*, Article 25).	Determine if the installation includes any special conservation area(s) within its boundaries. (1)(15) Verify that any tree felling within the nature conservation area was done only by permit. (15)(16) Verify that none of the following acts are performed within the nature conservation area: (15)(16) - constructing, rebuilding, or expanding a building or other structure - making residential land, clearing land, or otherwise changing the topography of the land - exploiting minerals or extracting soil and stone - filling in the water surface or draining land - causing an increase or decrease in the water level of rivers, lakes, marshes, or in the volume of their water - cutting trees and bamboo - establishing drainage equipment that will discharge wastewater or sewage into lakes, marshes, damp fields, or water basins or water courses that lead running water to said lakes, marshes, or damp fields.
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (15) Land Management Officer (DEH) (16) Building and Grounds Division (DEH)

COMPLIANCE CATEGORY: NATURAL AND CULTURAL RESOURCES MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
4-6. The Director General of the Environmental Agency may designate special marine areas (*Nature Conservation Law*, Article 27).	Determine if the installation has any operation within a special marine area. (1)(15) Verify that none of the following actions are performed without permission: (15)(16) - constructing, reconstructing, or expanding a structure - changing the topography of the seabed - exploiting minerals or extracting soil and stone - filling in the surface of the sea or draining the seashore - capturing tropical fish, coral, seaweed, or other designated animals or plants.
...	...
4-7. The Director General of the Environmental Agency may designate a wild animal and plant protection district (*Nature Conservation Law*, Article 26).	Determine if the installation includes any designated wild animal or plant protection area(s) within its boundaries. (1)(15) Verify that the following actions are not performed within the designated area: (15)(16) - capture of designated wild animal(s) - collection of the eggs of designated bird(s) - collection of designated plant(s).
...	...
CULTURAL RESOURCES	
4-8. Determine actions or changes since previous reviews of cultural resources management (GMP).	Examine copies of previous cultural resources reviews to determine if noncompliance issues have been resolved. (1)(2)
...	...
4-9. The installation should maintain a current file of Japanese regulations on cultural resources (GMP).	Determine if copies of the following are maintained at the installation: (1)(2) - *Cultural Resources Protection Law.* - *Nature Conservation Law.* - *Natural Parks Law.* - *Forestry Law.*
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (15) Land Management Officer (DEH) (16) Building and Grounds Division (DEH)

COMPLIANCE CATEGORY: NATURAL AND CULTURAL RESOURCES MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
4-10. Installations are required to notify the director of the Culture Agency prior to excavating in areas where cultural properties are known to exist (*Law of Cultural Resource Protection*, Article 57-3).	Verify that the installation notifies the director of the Culture Agency, using appropriate forms, through the Defense Facilities Administration Office (DFAO) within 60 days of beginning work. (1)
...	...
4-11. Installations are required to notify the director of the Culture Agency upon the discovery of any artifacts, shell middens, residences, ancient tombs, or any other archaeological or historical site (*Law of Cultural Resource Protection*, Article 57-6).	Verify that a procedure is in place to notify the director of the Culture Agency through the DFAO when an archaeological or historic site is found. (1)

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (15) Land Management Officer (DEH) (16) Building and Grounds Division (DEH)

INSTALLATION:	COMPLIANCE CATEGORY: NATURAL AND CULTURAL RESOURCES MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (15) Land Management Officer (DEH) (16) Building and Grounds Division (DEH)

Section 5

Environmental Noise Management

Section 5

ENVIRONMENTAL NOISE MANAGEMENT

A. Applicability

This protocol is applicable to U.S. Armed Forces installations that are involved in construction work, produce significant levels of noise from vehicles, and/or have aircraft.

B. Japanese Legislation and Regulations

- *Noise Regulation Law* (Law No. 98 of 1968 as amended through Law No. 88 of 1971) is designed to preserve the living environment and contribute to the protection of the people's health by the regulation of noise. The law specifically applies to noise generated by the operation of factories, construction and other work sites, and motor vehicles.

- *Cabinet Order for Implementation of the Noise Regulation Law* (Cabinet Order No. 324 of 1968 as amended through Cabinet Order No. 22 of 1986).

- *Vibration Regulation Law* (Law No. 64 of 1976) is designed to preserve the living environment and contribute to the protection of people's health by the regulation of vibration from several sources including construction work.

- *Cabinet Order for the Implementation of the Vibration Regulation Law* (Cabinet Order No. 280 of 1976, amended by Cabinet Order No. 22 of 1986).

- *Environmental Quality Standards for Noise* (Cabinet Decision, 25 May 1971) pursuant to Article 9 of the *Basic Law for Environmental Pollution Control* provides environmental quality standards that should be maintained for the preservation of the living environment and the protection of human health. It sets out permissible noise pollution levels for certain areas, provides instruction for the methods, places, and times of noise measurement, determines the period for achieving environmental quality standards, and sets policies for the achievement of environmental quality standards.

- *Environmental Quality Standards for Aircraft Noise* (Environment Agency Notification No. 154, 27 December 1973) provides the standards to be used for the regulation of aircraft noise, pursuant to Article 9 of the *Basic Law for Environmental Pollution Control* (Law No. 132 of 1967). This notification prescribes a method for measuring aircraft noise levels (expressed in terms of a standard value in weighted equivalent continuous perceived noise level (WECPNL)) and

mandates that prefectural governors designate into which of two levels of WECPNL a particular area within their prefecture falls. In addition, the notification sets forth target dates by which the environmental quality standards for noise should be met, along with provisions for protecting (through soundproofing measures) people living near an affected area when, despite measures taken to control aircraft noise, the target dates cannot be met.

- *Road Transportation Vehicle Law*, (Law No. 185 of 1 June 1951) has as one of its purposes to promote the use of transportation vehicles that are properly equipped so as to prevent environmental pollution and thus increase the public welfare. Chapter 3 defines safety standards (i.e., technological standards in terms of prevention of environmental pollution and safety operation) of road transportation vehicles. Chapter 5 defines surveillance of the vehicles for examining whether they satisfy the safety standards.

C. Prefectural Regulations

At this time, we do not have access to regulations promulgated by prefectural governments. The following are key provisions relating to prefectural responsibilities as mandated under the national laws and regulations cited previously.

- Designation of Area - the prefectural governor shall designate concentrated residential areas, school and hospital zones, and other such areas in which it is deemed necessary to protect the living environment of the residents from noise, as areas subject to the regulation of noise produced by specified factories and specified construction work. The prefectural governor is also responsible for monitoring noise levels in designated areas.

- Establishing Regulatory Standards - the prefectural governor shall set standards for specified hours and zones in the areas he designates. These shall be within the scope of the standards set forth by the Director General of the Environment Agency according to the necessary degree of noise control in regard to specified factories for specified hours and zones. In addition, if these standards are insufficient to protect persons within the designated areas, then cities, towns, or villages may establish regulatory standards exceeding the standards promulgated by the Director General.

- Inspection and Reporting Information - the prefectural governor may request the party responsible for specified facilities or the party responsible for a construction project to report on the status of specified facilities, progress of specified construction work, or other pertinent matters. The governor may also authorize his or her personnel to enter specified factories equipped with specified facilities or sites on which specified construction work is being carried out, and to inspect the specified facilities and/or investigate other pertinent matters.

- Recommendations for Plan Changes - when a prefectural governor finds that the level of noise generated by specified factories does not conform to the regulatory standards designed to protect the living environment of people adjacent to those factories, he or she may recommend necessary changes in the plans for noise abatement, operational methods, and/or layout of specified facilities within 30 days from the date of receipt of the report containing this information.

- Recommendations and Orders - if a party does not act upon a governor's recommendations for plan changes, the governor may issue under certain circumstances an executive order requiring that within a given time period an order mandating improvements in noise abatement methods, and/or changes in operational practices, and/or changes in the layout of the specified facilities be issued as deemed necessary to eliminate the harmful situation.

D. Key Compliance Definitions

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Motor Vehicle Noise* - noise generated by the operation of motor vehicles and motorcycles as stipulated in Article 2, Paragraphs 2 and 3 of the *Road Transportation Vehicle Law* (Law No. 185 of 1951) and provided for in the ordinance of the Prime Minister's Office.

- *Regulatory Standards* - the maximum permissible level of noise recorded on the boundary line of the factories or work sites in which there are specified facilities.

- *Specified Construction Work* - the following types of construction work that cannot be completed on the day of commencement:
    - work requiring pile drivers (excluding manual type), pile extractors, and pile driver-extractors (excluding pressure type driver-extractors); this does not include work in which pile drivers are used with earth augers
    - work requiring riveting hammers
    - work requiring rock drills (limited to situations in which the maximum distance between any two given work sites does not exceed 50 meters (m) in one day when continual movement of work sites is involved)
    - work requiring air compressors (limited to those compressors that use other than electric motors for power with a rated output of 15 kilowatts (kW) or more); this excludes air compressors that power rock drills.

- *Specified Facilities* - applies to installations in factories and work sites that produce high noise levels (see Appendix 1 of the Cabinet Order for the Implementation of the Noise Regulation Law to determine which of the facilities listed may be on a U.S. Armed Forces installation).

- *Specified Factories* - factories or work sites equipped with specified facilities.

- *Weighted Equivalent Continuous Perceived Noise Level (WECPNL)* - standard measurement of aircraft noise. The WECPNL values for each day are calculated from peak levels of aircraft noise, using the following equation:

$$WECPNL = dB(A) + 10 \log_{10} N - 27.$$

(NOTE: $dB(A)$ is energy mean of all peak levels of any one day, and N a value calculated by the following equation: $N = N_2+3N_3+10(N_1+N_4)$, where N_1 is the number of aircraft between 000 and 0700 hours, N_2 the number between 0700 and 1900 hours, N_3 the number between 1900 and 2200 hours, and N_4 the number between 2200 and 2400 hours.)

ENVIRONMENTAL NOISE MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	5-1 through 5-4	(1)(11)
Aircraft	5-5	(1)(11)
Construction	5-6	(1)
Motor Vehicles	5-7 and 5-8	(1)

***CONTACT/LOCATION CODE:**

(1) Directorate of Engineering and Housing (DEH)
(11) Aviation Commander (DPTMSEC)

COMPLIANCE CATEGORY: ENVIRONMENTAL NOISE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
5-1. Installations should determine actions or changes since previous review of environmental noise (GMP).	Examine copies of previous review to determine if noncompliance issues have been resolved. (1)
...	...
5-2. Installations should maintain copies of all relevant host nation and prefectural regulations on noise emissions (GMP).	Determine if copies of the following regulations are maintained and kept current at the installation: (1)(11) - *Noise Regulation Law.* - *Cabinet Order for the Implementation of the Noise Regulation Law.* - *Vibration Regulation Law.* - *Cabinet Order for the Implementation of the Vibration Regulation Law.* - *Environmental Quality Standards for Noise.* - *Environmental Quality Standards for Aircraft Noise.*
...	...
5-3. Installations should be aware of prefectural regulations concerning noise (GMP).	Verify that the installation personnel are aware of prefectural regulations concerning noise. (1)
...	...
5-4. Installations are required to meet specific environmental quality standards concerning noise (*Environmental Quality Standards for Noise*).	Verify that the standards in Appendix 5-1 are met. (1) (NOTE: These standards do not apply to aircraft, railway, or building construction noise.)
...	...
AIRCRAFT	
5-5. Installations are required to meet specific environmental quality standards concerning aircraft noise (*Environmental Quality Standards for Aircraft Noise*).	Verify that aircraft noise does not exceed 70 WECPNL in areas exclusively for residential use. (1)(11) Verify that aircraft noise does not exceed 75 WECPNL in other areas. (1)(11) Verify that aircraft noise levels are monitored to ensure compliance with above standards. (1)(11)
...	...

(1) Directorate of Engineering and Housing (DEH) (11) Aviation Commander (DPTMSEC)

COMPLIANCE CATEGORY: ENVIRONMENTAL NOISE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
CONSTRUCTION	
5-6. Installations are required to report specific types of construction work prior to beginning construction (*Noise Regulation Law*, Article 14; *Cabinet Order for the Implementation of the Noise Regulation Law*, Article 3; *Vibration Regulation Law*, Article 14; *Cabinet Order for the Implementation of the Vibration Regulation Law*, Article 4).	Determine if the installation conducts any of the following types of construction work: (1) - work requiring pile drivers (excluding manual type), pile extractors, and pile driver-extractors (excluding pressure type driver-extractors), excluding work for which pile drivers are used with earth augers - work requiring riveting hammers - work requiring rock drills (limited to situations in which the maximum distance between any two given work sites does not exceed 50 m in 1 day when continual movement of work sites is involved) - work requiring air compressors (limited to those compressors that use other than electric motors for power with a rated output of 15 kW or more, and excluding air compressors that power rock drills) - work that crushes buildings or other construction using steel balls - work using pavement breakers (limited to situations in which the maximum distance between any two given work sites does not exceed 50 m in 1 day when continual movement of work sites is involved). Verify that the following information has been reported to the prefectural governor no later than 7 days before beginning work: (1) - name and address of organization or company - type of facility or structure to be constructed - location of work and period of execution - method for controlling noise and/or methods of vibration abatement - other matters as prescribed by the Prime Minister's Office Ordinance.
...	...
MOTOR VEHICLES	
5-7. Installations are required to meet specific standards concerning motor vehicle noise (*Noise Regulation Law*, Article 16).	Verify that the standards in Appendix 5-2 are met. (1)
...	...

(1) Directorate of Engineering and Housing (DEH) (11) Aviation Commander (DPTMSEC)

COMPLIANCE CATEGORY: ENVIRONMENTAL NOISE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-8. Installations using devices to limit motor vehicle noise emissions must ensure that the equipment meets specific standards (*Road Transportation Vehicle Law*, No. 185 of 1 June 1951, Articles 41 and 44).	Verify that equipment such as mufflers used by the installation to limit motor vehicle noise emissions meets the standards established by the Ministry of Transportation. (1) (NOTE: This question applies to automobiles and scooters (vehicles whose engines have a displacement of less than 50 cubic centimeters (cc)).)

(1) Directorate of Engineering and Housing (DEH) (11) Aviation Commander (DPTMSEC)

Appendix 5-1

Environmental Quality Standards Concerning Noise
(Cabinet Decision of 1971)

Type of Area	Daytime	Morning and Evening	Night
Areas:			
1. AA	45 dB or less	40 dB or less	35 dB or less
2. A	50 dB or less	45 dB or less	40 dB or less
3. B	60 dB or less	55 dB or less	50 dB or less
Areas + roads:			
areas facing a road with 2 lanes in Area A	55 dB or less	50 dB or less	45 dB or less
areas facing a road with more than 2 lanes in Area A	60 dB or less	55 dB or less	50 dB or less
areas facing a road with 2 lanes in Area B	65 dB or less	60 dB or less	55 dB or less
areas facing a road with more than 2 lanes in Area B	65 dB or less	65 dB or less	60 dB or less

NOTES:

1. AA - Areas with high concentrations of facilities that require quiet, such as hospitals and schools.
2. A - Residential areas.
3. B - Areas with a mix of business, industry, and residential facilities.

Appendix 5-2

Chart 1: Limitation of Permissible Degree of Car Noise

(Environment Agency Notification No.53 of '75 - No.1 of '88)

Types of Cars	Limitation of Permissible Degree of Car Noise		
	1. Ordinary Measurement (dB)	2. Close Measurement (dB)	3. Measurement During Acceleration (dB)
New Cars: Ordinary cars: Total weight is more than 3.5 tons and the highest output of the engine is more than 200-horsepower.	80	107	83
Small-sized cars: Total weight is more than 3.5 tons and the highest outpout of the engine is 200-horsepower or less.	78	105	83
Light cars: Total weight is 3.5 tons or less.	74	103	78
Ordinary cars, small-sized cars and light cars mainly used for man transportation and the capacity is 10 persons or less.	70	103	78
Motorcycles	70	95	72
Motorcycles with side cars, very small motor vehicles.	74	99	75
Used Cars: Ordinary cars: Total weight is more than 3.5 tons and the highest output of the engine is more than 200-horsepower.	85	107	-
Small-sized cars: Total weight is more than 3.5 tons and the highest outpout of the engine is 200-horsepower or less.	85	105	-
Light cars: Total weight is 3.5 tons or less.	85	103	-
Ordinary cars, small-sized cars and light cars mainly used for man transportation and the capacity is 10 persons or less.	85	103	-
Motorcycles	85	95	-
Motorcycles with side cars, very small motor vehicles.	85	99	-

NOTES:

1. Measured 7 m aside on the left of the car from the car's centerline and 1.2 m high.
2. Measured 0.5 m aside from the mouth of the exhaust pipe and at the height of the mouth.
3. Measured 7.5 m aside on the left of the car from the car's centerline and 1.2 m high at the middle of a 20-meter section during which the car is fully accelerated.

Chart 2: Definitions

Enactment Regulation of Road Transportation Vehicle Law Ordinance of Transportation Ministry

(No. 74 of 1951 and No. 24 of 1989, Article 2)

Type	Structure and Engine	Sizes (- m or more)		
		L (m)	W (m)	H (m)
Small-sized cars	Cars with four wheels except for light cars, special large-sized cars and special small-sized cars	4.70	1.70	2.00
Light cars	Cars except for two-wheel cars, special small-sized cars	3.30	1.40	2.00
	Two-wheel cars except for special small-sized cars	2.50	1.30	2.00
Special large-sized cars	Vehicles with caterpillar tracks, road rollers, tire rollers, road stabilizers, tire dozers, graders, scrapers, shovel roaders, motor sweepers, forklifts, cranes, asphalt finishers, foil breakers, cars for agricultural works, snowplows, etc.	-	-	-
Special small-sized cars	Vehicles with caterpillar tracks, road rollers, tire rollers, road stabilizers, tire dozers, graders, scrapers, shovel roaders, motor sweepers, forklifts, cranes, asphalt finishers, foil breakers, cars for agricultural works, snowplows, etc.	4.70	1.70	2.00

INSTALLATION:	COMPLIANCE CATEGORY: ENVIRONMENTAL NOISE MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

(1) Directorate of Engineering and Housing (DEH) (11) Aviation Commander (DPTMSEC)

Section 6

Pesticide Management

Section 6

PESTICIDE MANAGEMENT

A. Applicability

This protocol applies to U.S. Armed Forces installations that use, store, or handle pesticides.

B. Japanese Legislation and Regulations

- *Cabinet Order for the Implementation of the Agricultural Chemicals Regulation Law* (Cabinet Order No. 56 of 1971 as amended by Cabinet Order No. 60 of 1987).

- *Poisonous/Harmful Substances Regulation Law* (Law No. 303 of 1950 as amended by Law No. 90 of 1985) is designed to regulate poisonous substances and harmful substances from the standpoint of public sanitation. The law identifies poisonous, harmful, and specific poisonous substances many of which are pesticides. See the *Hazardous Materials Management* section of this manual for lists of these substances.

C. Prefectural Regulations

At present, no information is available regarding specific prefectural requirements for pesticide management.

D. Key Compliance Definitions

- *Agricultural Chemical* - fungicides, insecticides, and other chemicals used to control fungi, nematodes, mites, insects, rodents, or other animals, plants, or viruses that are injurious to crops, growth accelerators, germination depressors, and other chemicals used for promotion and depression of physiological functions of the crops (including trees and agricultural and forestry products). Natural enemies used for control as described above may also be considered agricultural chemicals.

- *Agricultural Chemical of Crop Persistence* - an agricultural chemical that contaminates crops and is in danger of causing damage to human beings and livestock as a result of use of such crops.

- *Agricultural Chemical of Soil Persistence* - an agricultural chemical that contaminates soil of cultivated land and is a danger to human beings and livestock as a result of using crops contaminated by the soil.

- *Agricultural Chemical of Water Pollution* - an agricultural chemical used in great quantity over an extensive area, that is capable of causing serious damage to aquatic animals and plants, or of causing damage to human beings and livestock through entry into a public water system.

- *Agricultural Land* - land used for cultivation purposes, pasturage of domestic animals, or grassland for domestic animal breeding.

- *Agricultural Land Soil Pollution Policy Area (Policy Area)* - an area determined by the prefectural governor to contain specific harmful substances in concentrations that may produce crops and livestock that are hazardous to human health and the environment.

- *Designated Agricultural Crops and Others* - those crops and other agricultural plants, excluding forage plants, that are contained in a special area and have been determined by the prefectural governor to be unsuitable for cultivation or forage.

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Importer* - a person who imports agricultural chemical for sale.

- *Manufacturer* - a person who manages the manufacture or processing of agricultural chemicals for sale.

- *Official Standard* - established by the Minister of Agriculture, Forestry and Fisheries, it determines the amount of active ingredient, the maximum allowable amount of harmful ingredient, and other necessary items for each agricultural chemical.

- *Persistence* - the persisting property of a substance that is an ingredient of agricultural chemicals (including the substance produced by chemical conversion of the original substance) in crops and soil as a result of the use of agricultural chemical.

- *Pest Control Conductor* - a person who manages a facility that controls diseases and insect pests, or who promotes or depresses the physiological functions of the crops by using agricultural chemicals.

- *Special Area* - lands used for the production of agricultural crops and livestock, and designated by the prefectural governor to contain harmful substances in amounts known to accumulate in specific agricultural products causing them to be unsuitable for cultivation or use as forage crops (designated agricultural crops and others).

- *Specific Harmful Substance* - substances that are contained in agricultural land soil which might become the source of production of agricultural crops and livestock, and are harmful to human health or the growth of agricultural crops. This includes cadmium, copper, arsenic, and their compounds.

- *Valid Registration* - an acceptable registration for a facility or agricultural chemical at a given time. All stipulations and measurements made when applying for the registration must be reasonably correct and verifiable.

PESTICIDE MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	6-1 through 6-5	(1)(2)(4)(17)

*CONTACT/LOCATION CODE:

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(4) Safety and Health Officer
(17) Entomology Shop (DEH)

COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
6-1. Determine actions or changes since previous review of pesticide management (GMP).	Obtain copies of previous pesticide management reviews and determine if noncompliance issues have been resolved. (1)(2)
...	...
6-2. Installations should maintain copies of all relevant host nation agricultural chemical regulations (GMP).	Determine if current copies of the following are maintained onsite or are readily available: (2) - *Poisonous/Harmful Substances Regulation Law.*
...	...
6-3. Installations are required to handle poisonous/harmful substances properly (*Poisonous/Harmful Substances Regulation Law*, Article 11).	Verify that the person handling poisonous or harmful substances does not allow the substances to scatter, leak, flow out, or soak into the ground. (2)(4) Verify that containers used to hold poisonous or harmful substances are not used for food or drink. (2)(4) (NOTE: Poisonous/harmful substances are defined in the *Hazardous Materials Management* section.)
...	...
6-4. Installations are required to label containers of poisonous/harmful substances appropriately (*Poisonous/Harmful Substances Regulation Law*, Article 12).	Verify that poisonous substances are in containers labeled accordingly with white letters on a red background. (2)(17) Verify that harmful substances are in containers labeled accordingly with red letters on a white background. (2)(17)
...	...
6-5. Installations are required to dispose of poisonous or harmful substances appropriately (*Poisonous/Harmful Substances Regulation Law*, Article 15-2).	Verify that pesticides on the poisonous and harmful substances lists are disposed of according to technical standards defined by the ordinance. (2)(4)(17) (NOTE: For lists of poisonous and harmful substances, see the appropriate appendices in the *Hazardous Materials Management* section.)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (4) Safety and Health Officer (17) Entomology Shop (DEH)

INSTALLATION:	COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Japan	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (4) Safety and Health Officer (17) Entomology Shop (DEH)

Section 7

Petroleum, Oil, and Lubricant (POL) Management

Section 7

PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT

A. Applicability

This protocol applies to U.S. Armed Forces installations that store, dispose of, or utilize petroleum-based fuels, oils, or lubricants.

B. Japanese Legislation and Regulations

- *Law on the Prevention of Marine Pollution and Maritime Disaster* (Law No. 136 of 1970 as amended through Law No. 102 of 1985). This law prohibits, except in certain cases, the discharge of oils and oily mixtures from vessels at sea, and stipulates the kinds of equipment and facilities that seagoing vessels are to have, as well as their methods of operation and recordkeeping. The Minister of Transport is responsible for carrying out periodic inspections of the marine pollution prevention facilities, including bilge discharge prevention facilities, and may order modifications or repairs when it is found they do not conform to standards.

  The law also prohibits the discharge of oil into the sea from offshore facilities and aircraft, and provides for controls on the incineration of oil onboard ship or at offshore facilities. In addition, the Minister of Transport is given the responsibility for issuing permits to operate waste oil disposal facilities.

  The law outlines procedures for the prevention of marine pollution and maritime disaster, as well as for dealing with oil spills, fires, collisions, and other accidents and disasters at sea.

  A Maritime Pollution Prevention Center is also incorporated under the law to prevent or deal with maritime disasters, and to protect human life and property.

C. Prefectural Regulations

There are no specific prefectural regulations concerning POL management. Under the Law on the Prevention of Marine Pollution and Maritime Disaster, prefectural governors may, when they consider it necessary, request that the Minister of Transport take appropriate measures regarding a waste oil disposal facility in service, the waste oil disposal business operator (except when such waste oil disposal business operator is the port manager or fishing port manager of a prefecture), or the method of waste oil disposal.

D. Key Compliance Definitions

- *Bilge* - an oily mixture accumulated at the bottom of a ship.
- *Certificate-Requiring Oil* - oil that requires certification to incinerate.
- *Discharge into the Sea* - to set afloat or drop oil or oily mixtures into the ocean.
- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.
- *Incineration Confirmation Certificate* - certification by the Director General of the Maritime Safety Agency that the planned incineration conforms to technical standards.
- *Incineration Facility Inspection Certificate* - certification that a facility has passed inspection by the Minister of Transport of the types of oil and methods being used.
- *Incineration Record Book* - a book that the master of a ship or manager of an offshore facility maintains as a record of incineration practices.
- *Marine Pollution Prevention Certificate (MPPC)* - certification that an inspection of the ship's marine pollution prevention equipment and/or facilities has occurred. The Minister of Transport issues either a valid MPPC or a provisional MPPC.
- *Marine Pollution Prevention Equipment/Facilities* - the equipment necessary to prevent or, if unavoidable, control a discharge of oil.
- *Marine Pollution Prevention Handbook* - a handbook provided by the Minister of Transport for the ship master or oil pollution supervisor to record the frequency and results of marine pollution prevention equipment inspections.
- *Offshore Facility* - any structure constructed in sea areas (excluding facilities constructed adjacent to land exclusively for the discharge of oil from land).
- *Oil Pollution Supervisor* - a knowledgeable and experienced person who is appointed by the owner of a ship to supervise handling of oil.
- *Oil Record Book* - a book in which each handling or discharge of oil is recorded.
- *Sea Area* - marine areas within 10,000 meters (m) from low water levels of shores.

- *Ship* - any floating craft used for navigation in sea areas.

- *Specified Oil* - oil that is specified by the Minister of Transport as requiring special handling when discharged into the sea.

- *Tanker* - a ship in which the greater part of the cargo hold is constructed for the carriage of liquid cargo in bulk.

- *Waste Oil Disposal Business* - the business of disposing waste oil, on public demand, by means of a waste oil disposal facility

- *Waste Oil Disposal Facility* - the congregation of equipment used for disposal of waste oil (excluding disposal to be conducted onboard a ship in which waste oil has been generated).

POL MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	7-1 and 7-2	(1)(2)(5)
Ships and Offshore Facilities	7-3 through 7-12	(1)(2)(7)
Waste Oil Disposal	7-13	(1)(2)
Discharges	7-14 and 7-15	(1)(2)

*CONTACT/LOCATION CODE:

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(5) Fire Department
(7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: POL MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
7-1. Determine actions or changes since previous review of POL management (GMP).	Examine previous POL management reviews to determine if noncompliance issues have been resolved. (1)(2)
...	...
7-2. Installations should maintain copies of all relevant host nation POL regulations (GMP).	Verify that copies of the following are maintained and kept current onsite or are readily available: (1)(2)(5) - *Fire Prevention Law.* - *Law on the Prevention of Marine Pollution and Maritime Disaster.*
...	...
SHIPS AND OFFSHORE FACILITIES	
7-3. Installations with ships navigating between or within the ports of Japan must prevent or, if unavoidable, control discharge of oil (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 4 and 5).	Determine if oil has been discharged from a ship on sea areas. This is prohibited unless one of the following conditions exists: (1)(2) - the discharge of oil was for the purpose of securing safety of a ship, preventing damage to a ship or cargo, or saving human life - the discharge of oil was due to damage to a ship or by other unavoidable reasons, and when all possible measures were taken to prevent the continuous discharge of oil. Determine if any tanker, or ship weighing 100 tons or greater, has a discharge prevention facility. (1)(2)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (5) Fire Department (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: POL MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
7-4. New ships and ships which have experienced discharges of oil must submit to an inspection of marine pollution prevention equipment before returning the ship to navigational use (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 17-2 through 17-15).	(NOTE: Structural modifications and repairs made to marine pollution prevention equipment require reinspection.) Determine if marine pollution prevention equipment has been inspected and found to conform to technical standards. (2) (NOTE: If marine pollution prevention equipment does not meet technical standards, the Minister of Transport may order modifications, repairs, or other measures necessary to comply with requirements.) Verify that each ship has a valid pollution prevention certificate. (2) (NOTE: A ship subject to inspection must not be used for navigation unless it has a valid pollution prevention certificate or provisional pollution prevention certificate, and adheres to the conditions of its provisional pollution prevention certificate.) Discuss with master and crew the conditional requirements (if any) of their certificate, including: (2) - waters to be navigated - purpose of the ship. Determine if ship maintains a marine pollution prevention handbook to record inspection frequencies and results. (2)
...	...
7-5. The owner of a tanker, or a ship weighing 100 tons or greater, must designate one of the ship's officers as an oil pollution supervisor (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 6 - 8).	Verify that an oil pollution supervisor has been appointed. (1)(2) Verify that the oil pollution supervisor has knowledge and experience of operations concerning handling of oil. (1)(2) Determine if the oil pollution supervisor informs crew members whose work involves the handling of oil of those regulations laid out in the manual for prevention of oil pollution. (1)(2)
...	...
7-6. The master of a tanker, or a ship weighing 100 tons or greater, must provide an oil record book to document handling and discharge of oil (*Law on Prevention of Marine Pollution and Maritime Disaster*, Article 8).	Verify that the master provides an oil record book. (2) Verify that the oil pollution supervisor makes an entry into the oil record book whenever handling or discharge of oil takes place. (2) Verify that the oil record book is kept on board for a period of 3 years (yr) from the day the last entry was made. (2)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (5) Fire Department (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: POL MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
7-7. Offshore facilities and aircraft must prevent the discharge of oil into a sea area (*Law on Preventing Marine Pollution and Maritime Disaster*, Article 18).	Determine if oil has been discharged from an offshore facility or aircraft into a sea area. This is prohibited unless one of the following conditions exists: (2)(7) - the discharge of oil was for the purpose of securing the safety of or preventing damage to an offshore facility or an aircraft, or saving human life - the discharge of oil was due to damage to an offshore facility or by other unavoidable means and all possible measures to prevent the continuous discharge were taken.
...	...
7-8. Any person planning to establish an offshore facility must inform the Director General of the Maritime Safety Agency (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 18-2).	Verify that the following information has been provided to the Director General (usually done by the Defense Facilities Administration Bureau (DFAB) or the Defense Facilities Administration Office (DFAO)): (1)(2)(7) - name, title, and address of person establishing a facility - location and brief outline of the facility - other matters as required by the Ministry of Transport. Verify that any changes in the above information have been reported to the Director General. (1)(2)(7)
...	...
7-9. The supervisor of an offshore facility must maintain an oil record book (POL Operation Record) at the facility (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 19).	Determine if an oil record book is maintained either at the facility or in the supervisor's office. (2)(7) (NOTE: The record book may be kept in the supervisor's office if maintaining it at the facility is difficult.) Verify that the supervisor enters details into the oil record book relating to the receipt and handling of oil within the facility. (2)(7) Verify that the oil record book is safeguarded in the office of the supervisor for a period of 3 yr after the date of the last entry. (2)(7)
...	...
7-10. Incineration of oil on a ship or offshore facility is prohibited when the incineration is determined to constitute a grave risk to the preservation of the marine environment (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 19-2).	Determine that the persons intending to carry out the incineration must, prior to incineration, submit an application for confirmation that the planned incineration conforms to Director General's standards. (1)(2) Verify that the installation has received an incineration confirmation certificate. (1)(2) Verify that this certificate is maintained on the ship or offshore facility during the corresponding incineration. (1)(2)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (5) Fire Department (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: POL MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
7-11. A ship or offshore facility intending to initiate incineration of certificate-requiring oil at the facility is subject to inspection by the Ministry of Transport (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 19-3 through 19-8).	Verify that the facility has been inspected by the Minister of Transport (usually done by DFAB). (1)(2) Determine if the ship or offshore facility has been issued an incineration facility inspection certificate that stipulates which oils may be incinerated and the methods to be used (usually done by DFAB). (1)(2) Verify that the certificate is maintained in the ship or offshore facility. (1)(2) Review standard operating procedure (SOP) with personnel and determine if the stipulations of the facility's inspection certificate are being followed. (1)(2) (NOTE: Modifications and repair of the incinerator may require reinspection.)
...	...
7-12. The master of a ship or manager of an offshore facility who has been issued an incineration facility inspection certificate must maintain an incineration record book onsite (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 19-9).	Determine if the master/manager records incineration of certificate-requiring oil and other operations relating to the handling of oil. (2) Determine if the incineration record book is maintained onsite for a period of 2 yr from the date of the final entry. (2)
...	...
WASTE OIL DISPOSAL	
7-13. A person who intends to operate a waste oil disposal business must obtain permission from the Ministry of Transport for each waste oil disposal facility (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 20 through 28).	Verify either that the Ministry of Transport has designated the facility as a waste oil disposal business operator or that the facility has submitted an application (usually done by contracting center). The application should include: (1)(2) - name or title and address of the person who intends to operate a waste oil disposal business - location (in case of a ship, her main base) - sea areas, where ship intends to collect waste oil - kind of waste oil disposal equipment and performance - specifications of waste oil to be disposed of. Verify that the waste oil disposal business operator provides a waste oil disposal prescription concerning the waste oil disposal charges and other conditions of the acceptance of waste oil disposal to the Ministry of Transport (usually done by contracting center). (1)(2)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (5) Fire Department (7) Fuels Management Officer (DOL/DEH)

COMPLIANCE CATEGORY: POL MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
DISCHARGES	
7-14. A discharge of a large quantity of specified oil must be reported promptly to the nearest office of the Maritime Safety Agency (*Law on the Prevention of Marine Pollution and Maritime Disaster*, Article 38).	Verify that the following information is reported through the DFAO: (1)(2) - time, date, and place of the spill - conditions of the spill - what measures are being taken to prevent marine pollution.
...	...
7-15. Emergency measures must be taken when a large discharge of specified oil has occurred (*Law on Prevention of Marine Pollution and Maritime Disaster*, Article 39).	Determine SOP by interviewing personnel. (1)(2) Verify that emergency measures are taken by the responsible party(s) to prevent the dispersion of the discharged specified oil and the continued discharge of oil, and to remove the discharged oil. (1)(2)

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (5) Fire Department (7) Fuels Management Officer (DOL/DEH)

INSTALLATION:	COMPLIANCE CATEGORY: POL MANAGEMENT Japan	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (5) Fire Department (7) Fuels Management Officer (DOL/DEH)

Section 8

Solid Waste Management

Section 8

SOLID WASTE MANAGEMENT

A. Applicability

This protocol addresses the collection, transport, and disposal of solid waste. Solid waste is considered to be nonhazardous trash, rubbish, garbage, bulky wastes, liquids, or sludges generated by U.S. Armed Forces installations. It also includes any medical/pathological wastes generated by an installation hospital.

B. Japanese Legislation and Regulations

- *Waste Disposal and Public Cleansing Law* (Law No. 137 of 1970 as amended through Law No. 43 of 1983) is the main law concerning the collection, transport, and disposal of solid and other wastes. Its purpose is the preservation of the living environment and the improvement of public health through the appropriate disposal of wastes and the conservation of a clean environment. It establishes a system of waste management through the use of regulations placed on private and public collection, transport, and disposal of wastes.

- *Cabinet Order for Implementation of the Waste Disposal and Public Cleansing Law* (Cabinet Order No. 300 of 23 September 1971 as amended by Cabinet Order 336 of 1986) sets the standards and definitions for implementation of the basic law. It outlines standards for the collection, transport, and disposal of domestic and industrial wastes, and includes detailed descriptions of the methods to be used when handling certain types and quantities of wastes, the proper areas for disposal of those wastes, and reporting procedures to be followed for the correct disposal of waste materials.

C. Prefectural Regulations

No specific prefectural regulations are available at the present time. The following are actions that prefectural and local governments can take concerning solid waste management, based on provisions in national laws and regulations.

- Duties of Government and Municipalities - municipalities are obligated to produce concepts of cleaning and to execute waste treatment. Prefectural governments are bound to give technical advice to municipalities for carrying out their duties and to "take hold of the conditions of industrial wastes in the respective prefecture along with provisions of necessary measures."

- Disposal Plan - the prefectural governor is responsible for promulgating a plan on industrial wastes disposal. This includes the establishment of the industrial waste treatment plant, transport of the industrial wastes, determining the place for disposal of industrial wastes, and other matters related to the disposal of industrial wastes. Municipalities are required to set forth a plan on the disposal of domestic wastes. Advice must be sought from the Prefectural Council on Pollution Control under the *Basic Law for Environmental Pollution Control* (Law No. 132 of 1967 as amended).

- Disposal by the Prefectural Governments and Municipalities - since these governmental bodies are responsible for the proper handling of waste materials, they are entitled to receive compensation for expenses incurred by the establishment of public industrial wastes disposal plants and its associated expenses. They also have the authority to deny permission to private collectors, transporters, and storers of industrial and domestic wastes to carry out their activities. This power may be exercised primarily when private parties do not conduct their business in accordance with applicable health and welfare regulations.

- Treatment by Enterpriser - when a prefectural governor finds that the transport or disposal of industrial wastes does not comply with the applicable standards as set out in the cabinet order, or if the storage of industrial wastes is not in accordance with standards established by the Ordinance of the Ministry of Health and Welfare, the governor can order a change in the transport, disposal, or method of storage, and can provide other necessary means for the proper handling of these wastes.

D. Key Compliance Definitions

The following definitions were taken from the laws and regulations listed previously.

- *Domestic Wastes* - wastes other than industrial wastes.

- *Final Disposal Site for Domestic Wastes* - a site serving for the landfill disposal of domestic wastes that has an area of not less than 1000 square meters (m^2). In the case of landfill sites licensed under Article 2, Paragraph 1 of the *Public Water Area Landfill Law* (Law No. 57 of 1921), or those approved under Article 42 Paragraph 1 of the same law, this applies to only those sites designated by the Director General of the Environment Agency and the Minister of Health and Welfare as sites serving primarily for the landfill disposal of domestic wastes.

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Industrial Wastes* - comprises, among those wastes generated by enterprising activities, ashes, sludge, waste oil, waste acid and alkali, waste plastics, and other wastes defined by the cabinet order.

- *Night Soil* - domestic sewage sludge.

- *Refuse Disposal Plant* - refuse disposal plants whose disposal capacity is not less than 5 tons per day.

- *Waste Pesticides* - those chemical agents used for eliminating animals, plants, and viruses, and chemical substances manufactured or imported as the effective ingredients thereof, which are designated by the Director General of the Environment Agency and are unnecessary (excluding those occurring in the course of daily life and those treated in accordance with a method prescribed by the Director General of the Environment Agency).

- *Wastes* - refuse, big refuse, ashes, sludge, human excretion, waste oil, waste acid, waste acid and alkali, carcasses and other filthy and unnecessary matters, which are in solid or liquid state (excluding radioactive wastes).

SOLID WASTE MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	8-1 through 8-5	(1)(2)(6)
Landfills	8-6	(1)(2)(9)
Contractors	8-7	(1)(2)(34)
Ocean Dumping	8-8	(1)(2)
Waste Disposal Plants	8-9	(1)(2)(9)

***CONTACT/LOCATION CODE:**

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(6) Director of Logistics (DOL)
(9) Chief of Operations and Maintenance (O&M)
(34) Civilian Personnel Office (CPO)

COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
8-1. Determine action or changes since the last review of solid waste management (GMP).	Examine copy of previous solid waste reviews to determine if noncompliance issues have been resolved. (1)(2)
...	...
8-2. Installations should maintain copies of all relevant host nation and prefectural regulations and guidance documents regarding solid waste (GMP).	Determine if copies of the following host nation regulations are kept on file at the installation: (1)(2) - *Waste Disposal and Public Cleansing Law* (Law No. 137 of 1970, as amended). - *Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law* (Cabinet Order No. 300 of 23 September 1971 as amended through Cabinet Order No. 336 of 1986). - *Regulation for the Implementation of the Waste Disposal and Public Cleansing Law* (No. 35 of 1971 - No. 40 of 1989; Ministry of Health and Welfare Ordinance).
...	...
8-3. Installations should be aware of host nation and prefectural standards regarding the collection, transportation, and disposal of industrial waste (GMP).	Verify that the installation is aware of host nation and prefectural standards concerning the collection, transportation, and disposal of industrial waste. (1)(2)
...	...
8-4. Installations must obtain the approval of domestic waste disposal plans from the mayor of local municipalities in which the installation and disposal site(s) are located (*Waste Disposal and Public Cleansing Law*, Article 7).	Verify that all domestic waste disposal plans have written approval from the local mayor of the municipalities in which the installation and its waste disposal site(s) are located. (1)(2)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (6) Director of Logistics (DOL) (9) Chief of Operations and Maintenance (O&M) (34) Civilian Personnel Office (CPO)

COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
8-5. Installations are required to meet certain conditions for the collection, transport, and disposal of domestic waste (*Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 3, Paragraphs 1 and 3).	Verify that domestic wastes do not scatter or overflow during collection, transport, and disposal. (1)(2)(6)
...	...
LANDFILLS	
8-6. Domestic waste landfills must meet certain requirements (*Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 3, Paragraphs 4 and 5).	Verify that the landfill site is enclosed and marked as a site for domestic wastes. (1)(2)(9) Verify that measures have been taken to eliminate any potential for groundwater contamination. (1)(2)(9) Verify that night soil has been treated at a human night soil treatment plant, incinerated, or mixed with 0.5 percent or more slaked lime prior to its disposal in a landfill. (1)(2)(9) Verify that each layer of domestic waste is not more than 3 m thick and is covered with approximately 50 centimeters (cm) of soil and sand. (1)(2)(9) (NOTE: This does not apply to landfill less than 10,000 m^2, or when the volume of wastes is less than 50,000 m^3, or when landfill is conducted using underground space.) Verify that landfill disposal is conducted in a manner that prevents the breeding of rats, mosquitos, flies, or other vectors. (1)(2)(9) Verify that any materials containing polychlorinated biphenyls (PCBs) are not buried at the disposal site. (1)(2)(9)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (6) Director of Logistics (DOL) (9) Chief of Operations and Maintenance (O&M) (34) Civilian Personnel Office (CPO)

COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
CONTRACTORS	
8-7. Installations must monitor the performance of contractors who dispose of solid waste (*Cabinet Order for Implementation of the Waste Disposal and Public Cleansing Law*, Article 3).	Verify that the installation monitors the performance of its contractors with regard to insect and rodent control. (1)(2)(34)
...	...
OCEAN DUMPING	
8-8. Ocean dumping of domestic wastes from a ship must meet specific criteria (*Cabinet Order for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 3, Paragraphs 6 and 7).	Verify that domestic wastes are dumped from a ship only if they cannot be disposed of in a landfill. (1)(2) Verify that only the following domestic wastes are disposed of through ocean dumping: (1)(2) - waste explosives - sludge or human night soil that is either crushed or mixed with at least 0.1 percent ferrous sulfate or ferric chloride - noncombustible domestic wastes (excluding sludge, human night soil, waste pesticides, or any other waste that may adversely affect human health) - any other wastes as designated by the Director General.
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (6) Director of Logistics (DOL) (9) Chief of Operations and Maintenance (O&M) (34) Civilian Personnel Office (CPO)

COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
WASTE DISPOSAL PLANTS **8-9.** General waste disposal plants must meet certain technical standards (*Regulation for the Implementation of the Waste Disposal and Public Cleansing Law*, Article 4).	Determine if the installation operates a waste disposal plant. (1) Verify that the waste disposal plant: (1)(2)(9) - is structurally sound against its own weight, loaded weight, earthquake, and change of temperature - is protected from corrosion by wastewater and/or waste gases generated by garbage disposal - prevents garbage from scattering - does not emit offensive odors - does not contaminate groundwater. Verify that waste incinerators have exhaust gas disposal facilities. (1)(2)(9) Verify that sewage disposal facilities: (1)(2)(9) - are constructed to prevent scattering, splashing, or overflowing of sewage - have tanks with sufficient capacity - have devices for monitoring the amount of sewage in tanks - have devices to prevent the accumulation of scum in tanks. Verify that the waste disposal plant is kept clean and prevents the breeding of harmful insects such as mosquitos and flies. (1)(2)(9) Verify that the waste disposal plant is inspected regularly. (1)(2)(9) Verify that inspection records are kept for 3 years (yr). (1)(2)(9) (NOTE: See the *Hazardous Waste Management* section of this manual for standards concerning the transport, collection, and disposal of industrial wastes.)

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (6) Director of Logistics (DOL) (9) Chief of Opera and Maintenance (O&M) (34) Civilian Personnel Office (CPO)

INSTALLATION:	COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Japan	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (6) Director of Logistics (DOL) (9) Chief of Operations and Maintenance (O&M) (34) Civilian Personnel Office (CPO)

Section 9

Special Programs Management

Section 9

SPECIAL PROGRAMS MANAGEMENT

A. Applicability

This section contains protocols for asbestos and polychlorinated biphenyls (PCBs). Specifically, it addresses the health impacts on persons working in close proximity to levels of these two substances determined to be dangerous to human health.

B. Japanese Legislation and Regulations

- *Ordinance on Prevention of Hazards due to Specified Chemical Substances* (Ministry of Labor Ordinance No. 39 of 30 September 1972 as amended through Ministry of Labor Ordinance No. 33 of 16 August 1978) provides regulations and procedures for employers to use in order to prevent the occurrence of cancers, dermatitis, neurological disorders, and other health impairments in workers due to exposure to chemical substances. The employer is directed to confirm the toxicity of substances used, use substitutes for these substances, establish systematic methods for the manufacturing of products, improve facilities, promote improvement of the working environment, and to make overall efforts to reduce the number of workers who are exposed to toxic substances, the periods of time for exposures, and the levels to which they are exposed.

C. Prefectural Regulations

Specific prefectural regulations regarding these substances, if any, are not accessible at present. The Ministry of Labor Ordinance described previously does not allow for prefectural or local involvement with its provisions. The ordinance is only directed to actions of employers and ensures compliance with its provisions through oversight of the national Ministry of Labor.

D. Key Compliance Definitions

The terms contained in the protocol should either be apparent on their face or cogently defined in this section. For any unfamiliar terms, the reviewer should check the Worldwide ECAS manual.

SPECIAL PROGRAMS MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	9-1 and 9-2	(1)(2)
Asbestos	9-3 and 9-4	(2)(3)(25)
PCBs	9-5	(2)(3)

***CONTACT/LOCATION CODE:**

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(3) Preventive Medicine Officer
(25) Utilities Division (Exterior Electric Shop)

COMPLIANCE CATEGORY: SPECIAL PROGRAMS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
9-1. Determine actions or changes since previous review of special programs management (GMP).	Examine a copy of the previous review report to determine if noncompliance issues have been resolved. (1)(2) Determine if base changes relative to asbestos or PCB equipment have occurred since previous review and whether they affect the scope of the current review. (1)(2)
...	...
9-2. Installations should maintain copies of all relevant host nation laws and regulations concerning asbestos and PCBs (GMP).	Determine if copies of the following are maintained somewhere on the installation: (1)(2) - *Ministry of Labor Ordinance No. 39* of 30 September 1972 as amended through *Ministry of Labor Ordinance* No. 26 of 1988.
...	...
ASBESTOS	
9-3. Working conditions where asbestos is handled should be investigated (Article 39, Ministry of Labor Ordinance No. 33 of 1972 as amended).	Check working conditions wherever asbestos is being handled or is present, such as: (2)(3)(25) - vehicle maintenance shop areas dealing with brake linings - aircraft maintenance shop areas dealing with aircraft parts - asbestos insulation wrapping on pipes - asbestos tile for ceilings, walls, or floors - electrical shops dealing with distribution cords. Verify if medical follow-ups have been performed when deemed necessary by a medical doctor. (2)(3)
...	...
9-4. Personnel who come into contact with asbestos should be aware of potential health problems (Article 39, Ministry of Labor Ordinance No. 33 of 1972 as amended).	Verify that workers are informed of potential health problems associated with asbestos exposure. (2)(3) Determine if medical examinations include chest x-rays. (2)(3)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (25) Utilities Division (Exterior Electric Shop)

COMPLIANCE CATEGORY: SPECIAL PROGRAMS MANAGEMENT Japan	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
PCBs **9-5.** Personnel who come into contact with PCBs should be aware of potential health problems (Article 39, Ministry of Labor Ordinance No. 33 of 1972 as amended).	Verify that workers are informed of potential health problems associated with exposure to PCBs. (2)(3) Determine if medical examinations include a urobilinogenin urine test. (2)(3)

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (25) Utilities Div[illegible] (Exterior Electric Shop)

INSTALLATION:	COMPLIANCE CATEGORY: SPECIAL PROGRAMS MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (25) Utilities Division (Exterior Electric Shop)

Section 10

Water Quality Management

Section 10

WATER QUALITY MANAGEMENT

A. Applicability

This protocol includes regulations, responsibilities, and compliance requirements associated with wastewater discharge at U.S. Armed Forces installations.

Drinking water quality standards are not addressed in this protocol because the standards or requirements in the Worldwide ECAS manual meet or exceed Japanese national standards.

B. Japanese Legislation and Regulations

- *Water Pollution Control Law* (Law No. 138 of 1970 as amended through Law No. 90 of 1985) aims to prevent the pollution of water in public water areas by regulating effluent discharges into these areas. This law does not apply to water pollution caused by radioactive substances or to its prevention. This law does not prevent local governments from providing for the control of other pollutants (excluding harmful substances) than those stipulated in Article 2, Paragraph 2, Sub-paragraph 2, or for the control of pollution caused by harmful substances or the pollutants stated in the same sub-paragraph, in respect to water discharged into public water areas from factories or establishments other than specified factories.

- *Law Concerning Special Measures for the Preservation of Lake Water Quality* (Law 61 of 27 July 1984 as amended through Law No. 69 of 1986) establishes the basic policy for the preservation of lake water quality, and formulates a plan regarding the measures to be taken for the preservation of water quality of such lakes where it is eminent to establish an environmental standard regarding the pollution of water quality and take special measures such as enacting necessary regulations relative to the facility's discharge of polluted water, waste liquids, and other substances causing the pollution of water, whereby contributing to the public health and cultural life.

- *Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea* (Law No. 110 of 2 October 1973 as amended through Law No. 68 of 13 June 1978) is designed to protect the Seto Inland Sea through formulation of a plan to help its conservation and providing for restrictions on the installment of certain facilities to prevent damage from eutrophication.

- *Cabinet Order for the Implementation of the River Law* (Cabinet Order No. 14 of 1965) prohibits acts that negatively affect the control of rivers and contains a requirement to report the amount and quality of discharged wastewater and the method and time of the discharge, etc., if more than 50 cubic meters (m^3) of wastewater is discharged into a river per day.

- *Septic Tank Law* (Law No. 43 of 18 May 1983, as amended by Law No. 49 of 1988) is intended for the proper disposal of sewage, so as to promote the health and living environment of the public. The law regulates the installation, maintenance, inspection, cleaning, and construction of septic tanks, and provides a system for registering septic tank construction companies and providing qualifications for septic tank installers and managers.

- *Building Standard Law* (Law No. 201 of 24 May 1950) has as its purpose to establish minimum standards for the site, structure, equipment, and use of a building, so as to contribute to the preservation of the life and health of the people.

- *Provisional Guidance on the Prevention of Water Pollution by Agricultural Chemicals* was issued by the Ministry of the Environment to prefectural governments for the purpose of preventing water pollution caused by the use of agricultural chemicals at golf courses.

C. Prefectural Regulations

There are no available specific prefectural regulations concerning wastewater. The following are actions that local or prefectural governments can take concerning water quality management, based on provisions in national laws and regulations.

- Effluent Standards - where there is a public water area under prefectural jurisdiction for which the established effluent standards are insufficient to protect human health and the living environment, the prefecture may establish more stringent standards than the maximum permissible levels stipulated in the established effluent standards by enacting prefectural ordinances in accordance with criteria stipulated by cabinet order. If this is done, the scope of the defined area must be identified, and the governor of the prefecture shall notify in advance the Director General of the Environment Agency and the governors of any other concerned prefectures.

- Emergency Measures - the governor of a prefecture may, in a case where water pollution in the public water area within the prefecture caused by an extraordinary shortage of water or other similar situation (as stipulated by cabinet order), becomes so serious that it poses a threat to human health or the living

environment, make the situation public and, in accordance with the order of the Prime Minister's Office, order a reduction in effluents for a specified period or take other necessary measures.

- Plan for the Reduction of Total Pollution Load - under the fundamental policy for reduction of total pollution load, governors of prefectures in which a part of the prefecture is within a specified region shall establish a plan for the realization of target quantity of pollution reduction.

- Total Pollution Load Regulation Standards - governors of prefectures in which at least part of the prefecture is in a specified region shall, in respect to the pollution load of effluents discharged from specified factories within the specified region of a scale larger than that stipulated by order of the Prime Minister's Office, establish total pollution load regulation standards. These standards shall be the maximum permissible limits for the pollution load of effluents discharged from specified factories within the specified region.

- Order to Change Plan - when a governor of a prefecture receives a report on the installment of a specified facility or changes in the structure of a specified facility, and determines that the effluents at the place of discharge do not satisfy effluent standards, he or she may order changes in the structure or plan for treatment of the polluted water.

- Supervision - the governor of a prefecture shall continuously supervise the state of water pollution in public water areas under his or her jurisdiction.

D. Key Compliance Definitions

- *Concerned Mayor* - the mayor of a municipality in which a golf course is located.

- *Enterpriser* - a person who operates or intends to operate golf courses.

- *Environmental Water Quality Standards* - the provisions of Article 9, Paragraph 1 of the *Basic Law for Environmental Pollution Control* (Law No. 132 of 1967).

- *Good Management Practice (GMP)* - any practice that, although not mandated by law, is encouraged to promote safe operating procedures.

- *Measurement Program* - a program for measuring water quality in the public water area belonging to a prefecture, established by the governor of a prefecture after consultation with the chiefs of the local offices of national

administrative organs. The program provides for the matters to be measured, the station and method of measurement, and other items with regard to the measurements conducted by the national or local government, as to the water quality in the public water area.

- *Plan for Reduction of Total Pollution Load* - a plan that governors of prefectures may formulate if they are in a specified region. The plan targets amounts of reduction in the pollution load for each pollution source, outlines the means for achieving the reduction, and provides for other measures necessary to reduce the pollution load.

- *Prefectural Council on Environmental Pollution Control* - a governmental body which may, at the request of the prefectural governor, investigate and deliberate important matters concerning the prevention of water pollution in public water areas belonging to the prefecture, and state its opinion to the governor.

- *Public Water Areas* - water areas of public use such as rivers, lakes, ports and harbors, and coastal seas.

- *Specified Facilities* - those facilities defined in Appendix 10-1.

- *Specified Regions* - those regions specified by cabinet order as being related to water pollution in specified water areas.

- *Specified Water Areas* - wide public water areas (seas almost entirely surrounded by land) into which large quantities of water discharged in conjunction with life and business activities have come to flow as a result of population and industrial concentrations, and for which it is difficult to attain water pollution standards.

- *Water Supply* - the entire facility that supplies drinking water through pipes or other facilities.

- *Water Supply Equipment* - water supply branch pipe and directly connected equipment that are joined to the main water supply pipe.

- *Water Supply Facilities* - facilities for taking water from a river, storing water, conducing water, cleaning water, sending water, and supplying water.

WATER QUALITY MANAGEMENT PROTOCOL

GUIDANCE FOR WORKSHEET USERS

	REFER TO WORKSHEET ITEMS:	CONTACT THESE PERSONS OR GROUPS: *
All Installations	10-1 through 10-3	(1)(2)(9)
Specified Facilities and/or Wastewater	10-4 through 10-15	(1)(2)(9)(14)
Water Supply	10-16 and 10-17	(1)(3)(9)
Sewer Systems	10-18 through 10-22	(1)(2)(9)(14)(15)
Golf Courses	10-23 through 10-25	(2)(9)(17)(33)

***CONTACT/LOCATION CODE:**

(1) Directorate of Engineering and Housing (DEH)
(2) Environmental Coordinator (EC)
(3) Preventive Medicine Officer
(9) Chief of Operations and Maintenance (O&M)
(14) Wastewater Treatment Plant Supervisor (O&M)
(15) Land Management Officer (DEH)
(17) Entomology Shop
(33) Golf Course Pesticide Shop

COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
10-1. Determine actions or changes since previous review of water quality management (GMP).	Examine a copy of previous review report to determine if noncompliance issues have been resolved. (1)(2)
...	...
10-2. Installations should maintain copies of all relevant host nation and prefectural regulations on water quality management (GMP).	Determine if copies of the following are maintained at the installation: (1)(2) - *Water Pollution Control Law* (Law No. 138 of 1970 as amended through Law No. 90 of 1985). - *Environmental Water Quality Standards* (Basic Law for Environmental Pollution Control, Law No. 132 of 1967). - *Sewage Law* (Law No. 79 of 1958, as amended through 1976). - *Septic Tank Law* (Law No. 43, May 18, 1983 as amended through Law No. 49 of 1988). - *Water Law* (Law No. 177 of 1957 as amended through Law No. 87 of 1987). - *Cabinet Order for the Implementation of the River Law* (Cabinet Order No. 14 of 1965). - *Guidelines for Safe Use of Agricultural Chemicals at Golf Courses.*
...	...
10-3. Installations are required to comply with the wastewater standards set forth by Ordinance of the Prime Minister's Office (*Water Pollution Control Law*, Article 3).	Determine if appropriate personnel are knowledgeable of the ordinance standards for the type(s) of wastewater discharged at the installation. (1) Verify that the fixed limit is complied with for every type of noxious material (including those materials rendered noxious by heat) in the installation's wastewater discharge. (1)(2)(9)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (9) Chief of Operations and Maintenance (O&M) (14) Wastewater Treatment Plant Supervisor (O&M) (15) Land Management Officer (DEH) (17) Entomology Shop (33) Golf Course Pesticide Shop

COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SPECIFIED FACILITIES AND/OR WASTEWATER	
10-4. Installations that conduct operations meeting the definition of specified facility (see Appendix 10-1) and/or discharge wastewater that contains any of the pollutants listed in Appendix 10-2 are required to report to the prefectural governor on discharged wastewater (*Water Pollution Control Law*, Article 5 and 6).	Determine if the installation discharges any of the pollutants listed in Appendix 10-2 or contains any facilities that engage in the operations listed in Appendix 10-1. (1)(2)(9)
...	...
10-5. The local prefectural government may require more stringent standards for wastewater discharge within specified regions (*Water Pollution Control Law*, Article 4).	Determine if the local prefecture has delineated any specified regions that fall within the installation boundaries or that are affected by wastewater discharged by the installation, and confirm that the installation is in compliance with locally specific wastewater discharge levels for specified regions. (1)(2)(9)
...	...
10-6. The prefectural governor may establish a plan for reduction of total pollution load program which defines specific limits and procedures for wastewater discharge by source (*Water Pollution Control Law*, Article 4).	Determine if any facilities at the installation are considered to be a pollution source (average quantity of effluent per day of at least 50 cubic meters (m^3)). (1)(2)(9) Review the plan for the reduction of total pollution load for the region, and verify that the installation complies with the specifications and conditions outlined within the plan for any specified source on the installation. (1)(2)(9)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (9) Chief of Operations and Maintenance (O&M) (14) Wastewater Treatment Plant Supervisor (O&M) (15) Land M...gement Officer (DEH) (17) Entomology Shop (33) Golf Course Pesticide Shop

COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
10-7. Installations that do not comply with wastewater standards may be required by the prefectural governor to make improvements in order to attain the standards set forth in the plan for reduction of total pollution load (*Water Pollution Control Law*, Article 4).	Verify that the installation complies with any improvements in the treatment of wastewater ordered by the prefectural governor. (1)(2)(9)
...	...
10-8. Installations are required to measure and record information about the type and amount of contaminants contained in wastewater discharge (*Water Pollution Control Law*, Article 14).	Determine if adequate measurement and appropriate methods are used to determine the type and level of contaminants in wastewater discharge at the installation. (2)(9)(14) Verify that records are kept of these measurements in accordance with Form 8 and are kept for a minimum of 3 years (yr). (2)(9)(14)
...	...
10-9. Installations may be required to submit reports and records, and allow inspection of wastewater facilities by a representative of the prefectural governor (*Water Pollution Control Law*, Article 13).	Verify that reports and records requested by the prefectural governor are prepared and inspections carried out (if appropriate). (2)(9)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (9) Chief of Operations and Maintenance (O&M) (14) Wastewater Treatment P[illegible]upervisor (O&M) (15) Land Management Officer (DEH) (17) Entomology Shop (33) Golf Course Pesticide S[illegible]

COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
10-10. Installations that intend to discharge more than 50 m^3 of wastewater into a river per day must submit a report to the Ministry of Construction in advance of the discharge (*Cabinet Order for the Implementation of the River Law*, Article 16-5).	Verify that the installation has reported the following information to the Ministry of Construction: (2)(9)(14) - installation name and address - type and name of the river into which wastewater will be discharged - location of the discharge - duration of the discharge - amount of wastewater to be discharged - quality of wastewater to be discharged - methods of treating the discharged wastewater. (NOTE: The administrator of each river can determine the minimum level of wastewater discharge that is subject to this reporting requirement.) (NOTE: This reporting requirement does not apply to installations that are allowed to discharge wastewater according to a special set of governmental regulations concerning the establishment of facilities that discharge wastewater.)
...	...
10-11. Installations that discharge more than 50 m^3 of wastewater into a river per day must report certain information to the Ministry of Construction (*Cabinet Order for the Implementation of the River Law*, Article 16-5).	Verify that the installation has reported termination of the discharge or changes in the following information to the Ministry of Construction: (2)(9)(14) - installation name and address - location of the discharge - duration of the discharge - amount of wastewater being discharged - quality of wastewater being discharged - methods of treating the discharged wastewater.
...	...
10-12. In the absence of a wastewater treatment plant, human waste must be treated in a septic tank system (*Septic Tank Law*, Article 3).	Verify that if the installation does not have a wastewater treatment plant, it uses a septic ta stem for the treatment of human waste. (2)(9)(14)
...	...
10-13. Septic tanks must meet generally accepted technical standards for construction and efficiency (*Septic Tank Law*, Articles 6 and 9).	Verify that installation septic tanks meet accepted technical standards for construction and efficiency. (2)(9)(14)
...	...

(1) Directorate of Engineering and Housing (DEH) (2) Environmental Coordinator (EC) (3) Preventive Medicine Officer (9) Chief of Operations and Maintenance (O&M) (14) Wastewater Treatment Plant Supervisor (O&M) (15) Land Management Officer (DEH) (17) Entomology Shop (33) Golf Course Pesticide Shop

COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
10-14. Septic tanks must be tested annually for discharge water quality (*Septic Tank Law*, Article 11).	Verify that discharge from installation septic tanks is tested for water quality. (2)(9)(14) (NOTE: The Ministry of Welfare may require more frequent tests.) (NOTE: The Ministry of Welfare or its agent should be contacted to arrange testing (presumably through the Defense Facilities Administration Office (DFAO)).)
...	...
10-15. New or modified septic tanks must be tested for discharge water quality within a 2-month (mo) period that commences 6 mo after the startup or modification of the tank (*Septic Tank Law*, Article 11).	Verify that discharge from new or modified septic tanks is tested for water quality within the 2-mo period that commences 6 mo after the tank was modified or began operation. (2)(9)(14) (NOTE: The Ministry of Welfare or its agent should be contacted to arrange testing (presumably through the DFAO).)
...	...
WATER SUPPLY	
10-16. Water supply facilities are required to meet specific standards (Ordinance No. 11 of Ministry of Health and Welfare, Articles 4-1-1 through Article 4-1-6; *Water Law*, Article 4).	Verify that the effluent standards in Appendix 10-3 are met. (3)(9) Verify that the water does not contain any disease-causing bacteria. (3)(9) Verify that the water does not contain cyanogen, mercury, or other poisonous substances. (3)(9) Verify that the water does not smell bad and is colorless and transparent. (3)(9)
...	...
10-17. Water supply facilities must meet specific requirements (Water Law, Article 5).	Verify that water storage facilities can store amounts of water sufficient even for dry seasons. (1)(9) Verify that conducting facilities have sufficient numbers of pumps, conducting pipes, etc., to conduct necessary amounts of water. (1)(9) Verify that cleaning facilities have adequate sedimentation ponds, filtration ponds, etc., to clean the water to meet water quality standards. (1)(9) Verify that the structure and materials of the water supply facilities are sufficiently durable against the water pressure, ground soil pressure, earthquake, or other load, and is safe from water pollution or leak. (1)(9)
...	...

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COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SEWER SYSTEMS	
10-18. Installations must comply with a prefecture's comprehensive basin sewage plan, which specifies allowable limits and restrictions on discharge of effluents into public sewer systems (*Sewage Law*, Article 2-2).	Review the comprehensive basin sewage plan and verify that the installation is in compliance with the conditions and standards specified for: (1)(2)(9)(14) - discharge and disposal of wastewater and sewage through the local sewer system - location, structure, and function of wastewater and sewage facilities.
...	...
10-19. Installations using the public sewer system to discharge effluents must issue a report prior to the utilization of the sewer system (*Sewage Law*, Article 11-2; *Enforcement Regulation for the Sewage Law* of 19 December 1967 by the Ministry of Construction, No. 37, Article 8).	Verify that the installation submitted a report to the general manager of the public sewer system (usually done by, or in coordination with, the Defense Facilities Administration Bureau (DFAB)): (1)(2)(9)(14) - if the installation's average quantity of effluent per day meets or exceeds 50 m^3 - prior to discharging any material into the public sewer system - whenever the volume or quantity of the volume of effluents changes - if the installation is considered to contain any specified facilities. Examine a copy of the report for the following: (1)(2)(9)(14) - name and address of installation - name of installation representative - structure of specified facility - category of specified facility - method of using specified facility - method of disposal required for the effluent discharged from the specified facility - quantity of effluent discharged into the public sewage - other specific requirements prescribed by the Prime Minister's Office Ordinance.
...	...

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COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
10-20. Installations that discharge effluents into the public sewage system are required to meet specified standards prior to discharging the effluents into a public sewage system (*Sewage Law*, Article 12).	Verify that the installation complies with the standards for effluents outlined in Appendix 10-3. (1)(2)(9)(14) Verify that the installation complies with any additional requirements set forth by the general manager of the public sewer system (additional treatment or treatment facilities). (1)(2)(9)
...	...
10-21. Installations are required to obtain authorization prior to constructing any new or nonpublic sewer system (*Sewage Law*, Article 10, 16, 24).	Determine if the installation has plans to install or upgrade any sewer system within the installation boundaries. (1)(2)(15) Verify that any structure or changes made to the sewage system meets the criteria set forth in the *Building Standard Law* (Law 201/1950). (1)(2)(15) Verify that the installation received approval from the general manager of the public sewage system prior to engaging in the construction, removal, or alteration of items: (1)(2)(15) - fixed to an open channel of the public sewage system - projecting from the public sewage system - installed across the public sewage system - running through the public sewage system - installed beneath the public sewage system. (NOTE: The DFAB generally serves as the liaison in such matters.)
...	...
10-22. Installations are required to ensure that the structure of the sewage system that is connected to the stormwater channel conforms to the *Building Standard Law* (*Sewage Law*, Article 30).	Verify that the installation complies with the codes and regulations outlined in the *Building Standard Law* when installing, removing, or repairing any part of the sewage system, including the stormwater channels (usually the responsibility of the DFAB). (1)(2)(9)(14)
...	...

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COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT JAPAN	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
GOLF COURSES	
10-23. Installations with golf courses must follow specifications for agricultural chemical use (Chapter 1).	Verify that only registered agricultural chemicals are used at the golf course. (2)(17)(33) Verify that all precautionary measures have been taken to prevent danger and damage to man, beast, aquatic animals, plants, or the environment with regard to weather and configuration of the ground. (2)(17)(33)
...	...
10-24. Enterprisers must monitor water pollution caused by the use of agricultural chemicals at the facility (Chapter 2).	Verify that concentrations of agricultural chemicals used at the golf course are measured annually in regulating ponds or waterways (at the season of highest agricultural chemical use). (2)(9)
...	...
10-25. Installations must ensure that the percentage of agricultural chemicals present in runoff from golf courses does not exceed specified limits (*Provisional Guidance on the Prevention of Water Pollution by Agricultural Chemicals*, Section 3).	Verify that golf course runoff does not exceed the limits for percentage of agricultural chemicals specified in Appendix 10-4. (2)(9) (NOTE: Even if the percentage of agricultural chemicals in golf course runoff is below the specified limits, the installation should try to reduce the discharge of agricultural chemicals to the greatest possible extent.)

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Appendix 10-1

Specified Facility Operations

Cabinet Order for Implementation of the Water Pollution Control Law

(Cabinet Order No. 188 of 1971)

Newspaper, Publishing, Printing, and Platemaking:
- automatic film developing and washing facilities
- automatic developing and washing facilities for printing plates with photosensitive film

Photosensitive Goods Manufacturing:
- washing facilities

Cement Manufacturing:
- centrifuger
- shaper
- wet conditioning facilities

Batcher Plant for Ready-Mixed Concrete Manufacturing

Water Treatment Facilities for Water Supply Systems, Industrial Water Supply Systems, and Domestic Water Supply Systems

Facilities for Acid and Alkali Treatment of Metal Surfaces

Electroplating Facilities

Lodging Service (defined by the provisions of Article 2, Sub-paragraph 1 of the *Lodging Service Law*, excluding boarding house services):
- cooking facilities
- bathing facilities
- washing facilities

Laundry Facilities

Automatic Photo Development Washing Facilities

Hospitals:
- kitchen
- washing facilities
- bathing facilities

Waste Oil Treatment Facilities

Automobile Repair Washing Facilities

Appendix 10-1 (continued)

Automatic Car Washing Facilities

Domestic Waste Disposal Plant Incineration Facilities

Industrial Waste Disposal Plants

Night Soil Treatment Plants (servicing at least 501 people)

Sewage Treatment Plants

Wastewater Treatment Plants

Appendix 10-2

Pollutants Regulated By Cabinet Order

Cabinet Order for Implementation of the Water Pollution Control Law

(Cabinet Order No. 188 of 1971, Amended by Cabinet Order No. 89 of 1987)

Substances to be specified by cabinet order, as referred to under Article 2, Paragraph 2, Subparagraph 1 of the law, are as follows:

1. Cadmium and its compounds
2. Cyanides
3. Organic phosphorus (only diethyl-para-nitrophenylthiophosphate (parathion)), dimethyl-para-nitrophenylthiophosphate (methyl parathion), dimethyl-ethyl-mercaptoethyl thiophosphate (methyl dimethon), and ethyl-para-nitrophenylthionobenzenphosphate (EPN)
4. Lead and its compounds
5. Hexavalent chrome compounds
6. Arsenic and its compounds
7. Mercury, alkyl mercury compounds, and other mercury compounds
8. Polychlorinated biphenyls (PCBs).

Items to be specified by cabinet order, as referred to under Article 2, Paragraph 2, Subparagraph 2 of the law, are as follows:

1. Hydrogen-ion concentration
2. Biochemical oxygen demand and chemical oxygen demand
3. Amount of suspended solids
4. Content of normal hexane extracts
5. Content of phenols
6. Copper content
7. Zinc content
8. Dissolved iron content
9. Dissolved manganese content
10. Chrome content
11. Fluorine content
12. Number of coliform groups
13. Content of nitrogen or phosphorus (limited substances designated by the Order of the Prime Minister's Office as substances likely to cause substantial increase of vegetable planktons in the lakes).

Appendix 10-3

Effluent Standards

Ordinance of the Prime Minister's Office on Effluent Standards
(Prime Minister's Office Ordinance No. 35 of 1971)

Harmful Substance	Standard Value
Cadmium and its compounds	0.1 milligram (mg) of cadmium/liter (L)
Cyanides	1 mg of CN/ L
Organic phosphorus compounds (limited to parathion, methyl parathion, methyldimethone, and EPN)	1 mg/ L
Lead and its compounds	1 mg of lead/ L
Chromium (VI) compounds	0.5 mg of Chromium (VI)/ L
Arsenic and its compounds [1]	0.5 mg of arsenic/ L
Mercury, alkyimercury, and other mercury compounds	0.005 mg of mercury/ L
Alkylmercury compounds	Not detectable [2]
PCB	0.003 mg/ L

NOTES:

1. The effluent standard for *arsenic and its compounds* does not apply to the effluent discharged from hotels, inns, or other establishments using hot springs, which had been constructed prior to the implementation of the *Cabinet Order to Amend the Cabinet Order for Implementation of the Water Pollution Control Law* and *Cabinet Order for Implementation of the Waste Management Law*.

2. *Not detectable* indicates that the pollution status is below the detectable level as measured by the method established by the Director General of the Environment Agency.

Appendix 10-3 (continued)

Pollutant	Standard Value
Hydrogen ion concentration (Hydrogen exponent)	Effluents discharged in public use water areas other than the sea: from 5.0 to 8.6 Effluents discharged in the sea: from 5.0 to 9.0
Biochemical oxygen demands (BOD)	160 mg/ L (daily average: 120) [1]
Chemical oxygen demands	160 mg/ L (daily average: 120)
Suspended solids	200 mg/ L (daily average: 150)
Normal hexane extracts (content of mineral oils)	5 mg/ L
Normal hexane extracts (content of animal and vegetable oils and fats)	30 mg/ L
Phenols	mg/ L
Copper	3 mg/ L
Zinc	5 mg/ L
Soluble iron	10 mg/ L
Soluble manganese	10 mg/ L
Chromium	2 mg/ L
Fluorine	15 mg/ L
Number of coliform groups per cubic centimeter (cm^3)	3000/cm^3 (daily average)
Nitrogen	120 mg/ L (daily average: 60)
Phosphorus	16 mg/ L (daily average: 8)

NOTES:

1. The allowance limit designated by *daily average* is determined by the average pollution status of effluent in a day.

2. The effluent standards listed in the appendix apply to the effluents of factories or places of work that discharge an average of 50 m^3 or more of effluent per day.

3. The effluent standards concerning hydrogen ion concentration and soluble iron content do not apply to the effluents from factories or places of work pertaining to the sulfur mining industry (including industries mining iron sulfide ores co-existing with sulfur).

4. The effluent standards for hydrogen iron concentration, copper, zinc, soluble iron, soluble manganese, chromium, and fluorine do not apply to the effluent discharged from hotels, inns, or other establishments using hot springs, which had been constructed prior to the implementation of the *Cabinet Order to Amend the Cabinet Order for Implementation of the Water Pollution Law* and *Cabinet Order for Implementation of the Waste Management Law*.

5. The effluent standards concerning BODs apply exclusively to the effluents discharged in public water areas other than sea and lake areas. The effluent standards concerning chemical oxygen demands apply exclusively to the effluents discharged in sea and lake areas.

6. The effluent standards concerning nitrogen contents apply only to those lakes and marshes designated by the Director General of the Environment Agency as having the possibility of a substantial increase of vegetable planktons due to the nitrogen and the effluents discharged into public water areas that flow into such lakes and marshes.

7. The effluent standards concerning phosphorus contents apply only to those lakes and marshes designated by the Director General of the Environment Agency as having the possibility of a substantial increase of vegetable planktons due to the phosphorus and the effluents discharged into public water areas that flow into such lakes and marshes.

Appendix 10-4

Limits on Chemicals in Golf Course Runoff

Provisional Guidance on the Prevention of Water Pollution by Agricultural Chemicals

Agricultural Chemical Name	Criterion Value (mg/L)
Insecticides/Pesticides	
Isoxathion	0.08
Isofenphos	0.01
Chlorpyrifos	0.04
Diazinon	0.05
Trichlorfon (DEP)	0.3
Pyridaphenthion	0.02
Fenitrothion (MEP)	0.1
Fungicides	
Isoprothiolane	0.4
Iprodion	3.0
Etridiazole (echlomezol)	0.04
Oxine copper	0.4
Captan	3.0
Chlorothalonil	0.4
Chloroneb	0.5
Thiram	0.06
Tolclofosmethyl	0.8
Flutolanil	2.0
Pencycuron	0.4
Mepronil	1.0
Herbicides	
Asulam	2.0
Simazine (CAT)	0.03
Terbucarb	0.2
Napropamide	0.3
Butamifos	0.04
Propyzamide	0.08
Bensulide	1.0
Benfluraline	0.8
Pendimethalin	0.5
Mecoprop (MCPP)	0.05
Methyl daimuron	3.0

INSTALLATION:	COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Japan	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

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