



**US Forces, Korea** 

**US Army Corps** of Engineers

Construction Engineering Research Laboratory



# Korean Waste Management Law and Waste Disposal Forms

by Byung J. Kim Chai S. Gee Seung J. Yoon Yong H. Lee John T. Bandy

In 1989, a General Accounting Office survey indicated that no Eighth U.S. Army (EUSA) installations had yet acquired a complete library of Republic of Korea (ROK) hazardous waste regulations. Since the Korean Waste Management Law is the primary law governing the U.S. Forces, Korea (USFK) hazardous waste management program, the USFK/EUSA Environmental Program Office (EPO) tasked the U.S. Army Construction Engineering Research Laboratory to translate the Korean Waste Management Law and attendant documents into English.

This special report contains English translations of: (1) the Korean Waste Management Law, (2) the Korean Ministry of Health and Safety Administration (MOHSA) Order To Implement the Waste Management Law, (3) the Korean Presidential Decree To Implement the Waste Management Law, and (4) Korean government forms for documentation of waste disposal in that country. These translations will help USFK installation planners in Korea to formulate a hazardous waste management program that recognizes and adheres to host country regulations.

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## FOREWORD

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# CONTENTS

				Page
		298 DREWORD		1 2
I			TE MANAGEMENT LAW	
•				
	1		PROVISIONS	
		Article 1.	(Purpose)	11
		Article 2.	(Definition)	11
		Article 3.	(Limitation of Application)	11
		Article 4.	(Duties of National and Local Government)	12
		Article 5.	(Maintaining Cleanliness)	12
		Article 6.	(Prohibition of Open Dumping)	12
		Article 7.	(Waste Disposal Standards)	13
		Article 8.	(Master Plan on Waste Disposal)	13
	2	DOMESTI	C WASTE	14
		Article 9.	(Specially Clean Areas)	14
		Article 10.	(Domestic Waste Disposal)	14
		Article 11.	(Domestic Waste Handler)	15
		Article 12.	(Disqualification)	15
		Article 13.	(Cancellation of Permit)	16
		Article 14.	(Night Soil Treatment and Refuse Disposal Facilities)	16
		Article 15.	(Construction of Sewage Treatment Facility and Night Soil Treatment Tank)	16
		Article 16.	(Operation and Maintenance of Sewage Treatment	
			Facilities, Night Soil Treatment Tanks, etc.)	17
		Article 17.	(Design and Construction Business for Domestic	
			Waste Disposal Facilities)	18
		Article 18.	(Manufacturer of Night Soil Treatment Tanks)	18
		Article 19.	(Cancellation of Registration, etc.)	18
		Article 20.	(Continuation of Construction Works by the Designer or	
			Builder Whose Registration Is Canceled or Whose	
			Business Is Suspended)	19
	3	INDUSTRE	AL WASTE	20
	5	Article 21.	(Duties of Industrial Waste Dischargers, etc.)	20
		Article 22.	(Re-collection of Industrial Waste)	20
		Article 22. Article 23.	(Disposal of Industrial Waste)	20
		Article 25. Article 24.	(Industrial Waste Handler)	20 21
		Article 24.	(Report on Disposal of Industrial Waste)	21
		Article 25.	(Industrial Waste Disposal Plants)	21
		AI ULIT 40.	(Industrial maste Disposar Franco)	<i>4</i> 1
	4	GUIDANCI	E AND SUPERVISION OF BUSINESSMEN	23
		Article 27.	(Technical Manager)	23

	Article 28.	(Training for Personnel in Charge of Industrial	•••
		Waste Disposal)	23
	Article 29.	(Keeping and Maintaining Records)	23
	Article 30.	(Report on the Suspension and Cessation of Business)	23
	Article 31.	(Report and Inspection)	23
	Article 32.	(Order of Correctional Measures on Waste Disposal)	24
	Article 33.	(Hearing)	24
5	SUPPLEME	ENTARY PROVISIONS	25
	Article 34.	(Request for Import Restrictions on Industrial Waste)	25
	Article 35.	(Restriction on Breeding of Livestock)	25
	Article 36.	(Restrictions on Use of Night Soil)	25
	Article 37.	(Coordination of Waste Disposal Business)	25
	Article 38.	(Government Subsidy)	25
	Article 39.	(Report on the Results of Waste Disposal)	26
	Article 40.	(Fees for License, Registration, etc.)	26
	Article 41.	(Delegation and Consignment of Authority or Duty)	26
	Article 42.	(Enforcement Decree)	26
6	PENAL PR	OVISIONS	27
	Article 43.	(Penalties)	27
	Article 44.	(Concurrent Penalty Provisions)	29
	Article 45.	(Fines)	29
	Article 46.	(Imposition and Collection of Fines)	30
	ADDENDA		31
	Article 1.	(Enforcement Date)	31
	Article 2.	(Abrogation and Amendment of Other Laws)	31
	Article 3.	(Interim Measures on Business Permission)	32
	Article 4.	(Actions Based on the Garbage Disposal Law and	32
		Interim Measures on Continuing Actions)	32
	Article 5.	(Interim Measures on Penalty)	

# II MOHSA ORDER TO IMPLEMENT THE WASTE MANAGEMENT LAW (MOHSA Order No. 802, Effective 30 May 1987)

1	GENERAL	GENERAL PROVISIONS	
	Article 1.	(Purpose)	35
	Article 2.	(Types of Industrial Waste)	35
	Article 3.	(Night Soil Treatment Facilities)	35
	Article 4.	(Night Soil Treatment Tanks)	36
	Article 5.	(Refuse Disposal Facilities)	36
	Article 6.	(Domestic Wastewater Treatment Facilities)	36
	Article 7.	(Industrial Waste Disposal Facilities)	37

.

.

	Article 8.	(Livestock Wastewater Treatment Facilities)	37
	Article 9.	(Standards for Installation and Maintenance of	
		Public Restrooms)	38
	Article 10.	(Refuse Container for Public Use)	39
	Article 11.	(Refuse Transfer Station [RTS])	39
	Article 12.	(Standards and Methods for Waste Disposal)	39
	Article 13.	(Master Plan for Disposal of Waste)	44
2	DOMESTIC	C WASTE	45
	Article 14.	(Exclusion from Specially Clean Areas, etc.)	45
	Article 15.	(Structure of Restrooms in Specially Clean Areas)	45
	Article 16.	(Installation of Refuse Containers in Specially Clean Areas, etc.)	46
	Article 17.	(Standards and Methods of Disposal of Large	40
	Article 17.	Quantities of Refuse)	46
	Article 18.	(Scope of Recycle/Reuse, etc.)	46
	Article 19.	(Permit of Domestic Waste Disposal Business)	47
	Article 20.	(Issuing Permits for Modification of Permitted	
		Items of Domestic Waste Disposal Business)	47
	Article 21.	(Standards for Cleaning of Treatment Tanks)	48
	Article 22.	(Standards for Construction of Night Soil Treatment Facilities)	48
	Article 23.	(Standards for Construction of Refuse Disposal Facilities)	48
	Article 23.	(Approval of Construction of Night Soil Treatment Facilities)	49
	Article 25.	(Approval of Construction of Refuse Disposal Facility, etc.)	50
	Article 26.	(Operation and Maintenance Standards for Night Soil	
		Treatment Facility)	51
	Article 27.	(Standards for Operation and Maintenance of a Refuse	
		Disposal Facility)	51
	Article 28.	(Report of Construction of Sewage Treatment Plant, etc.)	52
	Article 29.	(Inspection of Completion of Construction)	53
	Article 30.	(Standards for Construction of Sewage Treatment Facilities, etc.)	53
	Article 31.	(Standards for Operation and Maintenance of Sewage Treatment Facilities)	54
	Article 32.	(Check Lists, etc.)	54
	Article 33.	(Approval of Design and Construction of a Domestic	
		Waste Disposal Facility)	54
	Article 34.	(Cases in Which Domestic Waste Disposal Facilities Can Be	
		Designed and Constructed)	55
	Article 35.	(Qualifications of Construction Monitor)	55
	Article 36.	(Registration of Design and Construction of Domestic Waste	
		Disposal Facilities)	55
	Article 37.	(Registration to Modify Registered Items of a Business to	
		Design and Construct Domestic Waste Disposal Facilities)	56
		• • •	

			Page
	Article 38.	(Requirements for Registration of a Night Soil Treatment	
		Tank Manufacturing Business)	56
	Article 39.	(Registration to Modify Registered Items of a Business of	
		Night Soil Treatment Tank Manufacturing)	57
	Article 40.	(Specifications and Performance of Night Soil Treatment Tanks)	57
	Article 41.	(Appointment of a Construction Monitor)	57
3	INDUSTRIA	AL WASTE	58
	Article 42.	(Report by Businessmen)	58
	Article 43.	(Recordkeeping of Industrial Wastes)	58
	Article 44.	(Standards for Disposal of Industrial Waste by a Third Party)	58
	Article 45.	(Categories and Reporting of Recycling and Reuse of Industrial Waste)	59
	Article 46.	(Construction and Operation of Public Disposal Facilities)	59
	Article 40.	(Consignment Fee for Public Waste Disposal Facilities)	59
	Article 47.	(Permit for Industrial Waste Disposal Business)	
	Article 48.	(Permit of Modification of an Industrial Waste Disposal Business)	61
		• •	61
	Article 50.	(Reissue of Certificate of an Industrial Waste Disposal Business)	61
	Article 51.	(Report on Disposal of Industrial Waste) (Standards for Construction of Industrial Waste Disposal	01
	Article 52.	(Standards for Construction of Industrial Waste Disposal Facilities)	62
	Article 53.	(Approval of Construction of Industrial Waste Disposal Facilities)	62
	Article 54.	(Approval of Modification of Industrial Waste Disposal Facilities)	62
	Article 55.	(Standards for Operation and Maintenance of Industrial Waste Disposal Facilities)	63
		Waste Disposar Facilities	05
4	GUIDANCE	AND SUPERVISION OF BUSINESSMEN	65
	Article 56.	(Checklists for the Technical Maintenance Consignment Contractor)	65
	Article 57.	(Training of Personnel in Charge of Waste Disposal)	65
	Article 58.	(Recording Details of Waste Disposal)	65
	Article 59.	(Report on the Suspension, Reopening, or Termination of Business)	
	Article 60.	(Summary Report of Waste Disposal)	66
	Article 61.	(Criteria for Administrative Measures, etc.)	66
	Article 62.	(Hearing)	66
5	SUPPLEME	NTARY PROVISIONS	. 67
	Article 63.	(Standards for the Use of Excreta in Specially Clean Areas)	67
	Article 64.	(Summary Report of Waste Disposal by Mayors/Governors)	67
	Article 65.	(Fees for Permit, etc.)	67
	Article 66.	(Consignment of Management and Operation of Waste Disposal	
		Facilities)	67
	Article 67.	(Procedures for Charging Fines)	67

.

.

Page

ADDENDA	A TO THE MOHSA ORDER	68
Article 1.	(Enforcement Date)	68
Article 2.	(Abrogation of Regulation of Garbage Disposal Law)	68
Article 3.	(Interim Measures Due to the Abrogation of the Regulation of	
	Garbage Disposal Law)	68
Article 4.	(Interim Measures on Areas of Public Restroom Compartments)	68
Article 5.	(Interim Measures on Construction of Flush Toilets)	68
Article 6.	(Interim Measures on Restrooms in Specially Clean Areas)	68
Article 7.	(Interim Measures on Standards for Construction of Sewage	
	Treatment Facilities and Night Soil Treatment Tanks)	69
Article 8.	(Interim Measures on Report of Recycler or Reuser of	
	Industrial Waste)	69
Article 9.	(Interim Measures on Permit of Construction of Industrial	
	Waste Disposal Facilities)	69
Article 10.	(Interim Measures on Report of Businessmen Who Generate	
	Industrial Waste)	69
Article 11.	(	
	Registration)	69
Article 12.	•	
	Registration or Permit)	69
Article 13.	(Interim Measures on Application of Administrative Actions)	70
	HE MOHSA ORDER	
	AL DECREE NO. 12119)	
Article 1.	(Purpose)	133
Article 2.	(Areas Prohibited From Open Waste Dumping)	133
Article 3.	(Those Responsible for Disposal of Their Own Refuse)	133
Article 4.	(Areas in Which Sewage Treatment Facilities Shall Be	100
-	Constructed, etc.)	133
Article 5.	(Buildings That Require Night Soil Treatment Tanks)	134
Article 6.	(Categories of Livestock Facilities That Require	
	Livestock Wastewater Treatment Facilities)	134
Article 7.	(Facilities in Which a Third Party May Perform the	
	Inside Cleaning)	134
Article 8.	(Coordination of Permits To Construct Industrial Waste	
	Disposal Facilities)	134
Article 9.	(Waste Disposal Facilities Requirement To Appoint a	
	Technical Manager)	135
Article 10.	(Qualifications of Technical Manager)	135
Article 11.	(Contract of Consignment for Technical Management)	135
Article 12.	(Personnel Requiring Waste Disposal Training)	136
Article 13.	(Delegation of Authority)	136
Article 14.	(Imposition of Fines)	138

III

			Page
	Article 15.	(Implementation Regulations)	138
	ADDENDA TO 1	THE PRESIDENTIAL DECREE	139
	ANNEX TO THE	E PRESIDENTIAL DECREE	140
IV	KOREAN WAST	TE DISPOSAL FORMS	141
	Form No. 1	Report on Recycle/Reuse of Domestic Waste	142
	Form No. 2	Certificate of Report on Recycle/Reuse of Domestic Waste	143
	Form No. 3	Application for Permit/Change of Permit of Domestic Waste	
		Disposal Business	144
	Form No. 4	Certificate of Permit of Domestic Waste Disposal Business	146
	Form No. 5	Application for Approval of Waste Treatment Facility	148
	Form No. 6	Report for Construction of Waste Disposal Facility	150
	Form No. 7	Application for Inspection of Completed Construction	
		of Waste Disposal Facility	151
	Form No. 8	Management Card for Sewage Treatment Facility/Night Soil Treatment Tank/Livestock Wastewater Treatment	
		Facility	153
	Form No. 9	Application for Approval of Design/Construction of	
	10.1111.0.7	Night Soil/Refuse/Sewage Treatment Facility	157
	Form No. 10	Application for Registration/Modification of	
		Registration of Construction Business of Domestic	
		Waste Disposal Facility	159
	Form No. 11	Certificate of Registration for Design/Construction	107
	roi ili 110. 11	Business of Domestic Waste Disposal Facility	161
	Form No. 17	Application for Registration/Modification of Registration	101
	FOLM NO. 12	of Night Soil Treatment Tanks Manufacturing Business	163
	Form No. 12	Certificate of Registration for Night Soil Treatment	105
	FULMINU. IS	Tanks Manufacturing Business	165
	Form No. 14	Report on Industrial Waste Generation	165
		•	167
		Management Record of Industrial Waste	109
	FORM NO. 10	Report on Recycle/Reuse/Change of Recycle Ruse of	170
	E	Industrial Waste	170
	FOFM NO. 17	Certificate of Report on Recycling/Reuse of Industrial	150
		Waste	172
	Form No. 18	Permit for Modification on Industrial Waste Disposal	154
		Business	174
	Form No. 19	Application for Permit/Permit for Modification of	
		Industrial Disposal Business	176
		Certificate of Permit for Industrial Waste Disposal Business	178
		Report on Modification of Industrial Waste Disposal Business	180
	Form No. 22	Application for Reissue of Certificate of Permit for	
		Industrial Waste Disposal Business	181

•

		Report on General/Special Industrial Waste Disposal	
		Transportation	182
]	Form No. 24	Report on Landfill of Special Industrial Waste	184
]	Form No. 25	Application for Approval/Approval of Modification	
		of Construction of Industrial Waste Disposal Facility	186
]	Form No. 26	Report on Operation of Industrial Waste Disposal Facility	188
]	Form No. 27	Report on Operation of Industrial Waste Landfill Facility	191
]	Form No. 28	Logbook for Domestic Waste Management	192
]	Form No. 29	Logbook for Industrial Waste Management for	
		Recycling/Reuse Businessman	193
]	Form No. 30	Logbook for Industrial Waste Management for Disposal	
		Businessman	194
}	Form No. 31	Report on Suspension/Termination/Reopening of	
		Domestic Waste Disposal Business	195
]	Form No. 32	Report on Suspension/Termination/Reopening of	
		Industrial Waste Disposal Business	197
		Summary Report on Recycling/Reuse of Domestic Waste	198
J	Form No. 34	Summary Report on Generation and Disposal of	
		Industrial Waste	<b>199</b>
		Summary Report on Recycling/Reuse of Industrial Waste	200
		Summary Report on Disposal of Industrial Waste	201
		Detail of Generation and Disposal of Industrial Wastes	202
		Details of Collection and Disposal of Industrial Wastes	203
]	Form No. 39	Detail of Recycle/Reuse of Industrial Wastes	204
KOR	EAN-ENGLI	SH GLOSSARY OF TERMS	205
ENG	LISH-KORE	AN GLOSSARY OF TERMS	212

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#### KOREAN WASTE MANAGEMENT LAW

#### **CHAPTER 1. GENERAL PROVISIONS**

### Article 1. (Purpose)

The purpose of this law is to preserve natural and human environment through appropriate disposal of waste, and therefore to improve public health and to preserve a clean environment.

#### Article 2. (Definition)

The terms used in this Law shall be defined as follows:

1. "Waste" refers to substances unnecessary for residential, commercial, and industrial activities such as refuse, ash, sludge, human excreta, waste oil, waste acid and alkali, and carcasses.

2. "Domestic waste" refers to waste such as refuse and human excreta excluding industrial waste.

3. "Industrial waste" refers to sludges, residues, waste oil, waste acid and alkali, waste synthetic resins and waste rubber as a result of industrial activities. The Ordinance of the Ministry of the Health and Social Affairs (MOHSA) will specify these.

4. "Night soil treatment facility" refers to a facility where human excreta is finally treated in a safe manner to be specified by the MOHSA Order.

5. "Night soil treatment tank" refers to a facility where human excreta are settled and decomposed to be specified by the MOHSA Order.

6. "Refuse disposal facility" refers to a facility where domestic waste is landfilled, incinerated, or recovered and composted in a manner specified by the MOHSA Order.

7. "Domestic sewage treatment facility" refers to a facility where domestic wastewater (toilet wastewater included) is treated as stipulated in the MOHSA Order.

8. "Industrial waste disposal facility" refers to a facility where industrial wastes are landfilled, incinerated, destroyed, neutralized, or cement solidified, as stipulated in the MOHSA Order.

9. "Livestock wastewater treatment facility" refers to a facility where livestock waste pollution is eliminated or reduced as stipulated in the MOHSA Order.

## Article 3. (Limitation of Application)

The stipulations of this Law shall not be applied to radioactive waste or substances that are contaminated by radioactivity.

#### Article 4. (Duties of National and Local Government)

1. The Mayor of the special city of Seoul, the Mayors of the cities under direct control of the national government (Busan, Inchon, Kwangju, Daejun Daegu), Mayors of other cities, and County heads shall construct domestic waste disposal facilities, operate and maintain them efficiently, and improve operation methods. They shall also endeavor to cultivate the public awareness of clean environment.

2. The Mayor of the special city of Scoul, mayors the cities under direct control of the national government, and Governors of the provinces (hereinafter referred to as "Mayors/Governors") shall take necessary actions to dispose of industrial waste properly. They shall collect the information on the amount of industrial waste production and disposal in their respective areas of jurisdiction and secure land disposal sites.

3. Governors shall provide necessary technical assistance to the Mayors/County Heads to adequately perform the duties mentioned in Article 4-1, and coordinate the domestic waste disposal works in the provinces.

4. The National Government shall support technical research and development on waste disposal, provide necessary technical and financial assistance to Mayors/Governors and County heads, enabling them to perform duties described in Articles 4.1 through 4.3. The National Government shall also coordinate the waste disposal works among the special city of Seoul, the cities under direct control of the national government, and provinces (hereinafter referred to as "Cities/Provinces").

### Article 5. (Maintaining Cleanliness)

1. All citizens shall endeavor to preserve a clean natural and living environment.

2. Land or building owners, occupants or caretakers shall endeavor to maintain clean land or buildings in their possession, care, or management, and shall conduct thorough cleaning in accordance with a plan that shall be prescribed by municipalities.

3. The municipalities shall provide public toilets, waste containers, and waste transfer stations where necessary, and operate and maintain them sanitarily.

#### Article 6. (Prohibition of Open Dumping)

1. No person shall dump domestic waste in the following areas or sites without justifiable reason:

1) Specially clean areas and coastal areas bordering on specially clean areas

2) Parks, squares, roads, harbors, sewer systems, rivers, canals, lakes, forests, and other areas or sites prescribed by the Presidential Decree.

2. No one shall dump industrial waste without complying with the disposal standards and methods specified in Article 7.

#### Article 7. (Waste Disposal Standards)

Waste shall be disposed of in accordance with the technical standards and methods stipulated by the MOHSA Order.

#### Article 8. (Master Plan on Waste Disposal)

1. Mayors/Governors shall set forth a master plan on waste disposal in the areas of their jurisdiction in accordance with the guidelines set by the Administration of Environment (AE) to be approved by the AE. Any modification to an approved disposal plan requires the same approval. When the AE approves the master plan or its modification, it shall consult with heads of the National Government agencies concerned.

2. The Mayor/County head shall set forth a master plan on domestic waste disposal in the areas of his jurisdiction and submit it to the Governor concerned.

3. The AE shall establish a national master plan on waste disposal based on the plans of cities/provinces that are described in Article 8-1.

4. Necessary matters for the establishing and approving a master plan for waste disposal pursuant to Article 8-1, 8-2, and 8-3 shall be stipulated in the MOHSA Order.

#### **CHAPTER 2. DOMESTIC WASTE**

#### Article 9. (Specially Clean Areas)

1. Specially clean areas are defined as the special city of Seoul, the cities under direct control of the national government, other cities, and eups. However, the areas designated by the mayors of the special city of Seoul, the mayors of the cities under direct government control, other mayors, or county heads (hereinafter referred to as "Mayors/County Heads") may be excluded from the specially cleaning areas. This excluded areas shall be stipulated by the MOHSA Order.

2. The County head is entitled to designate the whole or part of its areas of his jurisdiction as a specially clean area, as stipulated by the MOHSA Order.

3. Land or building owners, occupants or caretakers in the specially clean areas shall:

1) Provide restrooms and waste containers as stipulated in the MOHSA Order, and operate and maintain them sanitarily

2) Keep recyclable, noncombustible, and combustible wastes separately, to be stipulated in the regulations of the special city of Scoul, the cities under direct control of the national government, other cities, or counties

3) Cooperate fully with Mayors/County Heads for domestic waste disposal activities.

#### Article 10. (Domestic Waste Disposal)

1. Mayors/County Heads shall collect and dispose of domestic waste discharged and accumulated from the specially clean areas of their jurisdiction. Pursuant to Article 11, they are entitled to have disposal contractors for domestic waste collect and dispose of domestic waste, as prescribed by the regulations of the municipalities concerned.

2. A large volume waste generator that conducts business activities in the specially clean areas shall dispose of the waste solely, as specified in the Presidential Decree.

3. Anyone who runs motor vehicles, ships, or airplanes that are equipped with toilets, and anyone who installs and maintains portable toilets shall dispose of the toilet waste in accordance with the treatment standards and methods for domestic waste stipulated in Article 7.

4. Anyone who intends to recover and reuse domestic waste as stipulated in the MOHSA Order shall report to Mayor/County head in accordance with the stipulation in the MOHSA Order.

5. Mayors/County Heads are entitled to charge a fee prescribed by the municipalities' regulation for domestic waste collection, transportation, incineration, or landfill in Article 10-1.

#### Article 11. (Domestic Waste Handler)

1. Anyone who intends to undertake collection, transportation, incineration, or landfill of domestic waste as a business shall comply with the requirements for facilities, equipment and technical abilities specified by the MOHSA Order before Mayors/County Heads grant a permit for that type of business. A permit is also required when some important permitted items specified by the MOHSA Order are changed.

2. The classification and description of domestic waste disposal services are as follows:

1) Human excreta collection/transportation business: Any business that collects human excreta and transports them to disposal sites

2) Refuse collection/transportation business: Any business that collects refuse and transports it to disposal sites

3) Night soil treatment/disposal business: Any business that treats and disposes of night soil finally and sanitarily at its own night soil treatment facilities

4) Refuse disposal business: Any business that disposes of refuse by means of landfill, incineration, recycling, or composting at its own facilities

5) Septic tank cleaning business: Any business that cleans wastewater treatment facilities, night soil treatment tanks, or livestock wastewater treatment facilities in accordance with the standards of the MOHSA Order.

3. Before Mayors/County Heads permit a business of night soil or refuse disposal services or a modification to that business, they shall obtain an approval from the AE.

4. Mayors/County Heads are entitled to limit business areas or add necessary conditions to the permitted businessman (hereinafter referred to as a "handler of domestic waste") pursuant to Article 11-1.

5. The handler of domestic waste shall not charge a disposal fee in excess of the standard stipulated by the city/county's regulations.

#### Article 12. (Disqualification)

Mayors/County Heads shall not give a permit to any person who falls under one of the following categories:

1) An incompetent or a quasi-incompetent

2) A bankrupt who has not been reinstated

3) Anyone who has been sentenced to an imprisonment due to violation of this Law, who has either not served the full term or was given a suspension of sentence, less than 2 years before

4) Anyone whose permit of disposal contractor of domestic waste has been canceled less than 2 years before

5) Any corporation whose executive(s) comes fall under one of the previous categories.

#### Article 13. (Cancellation of Permit)

1. In cases where any disposal contractor of domestic waste falls under one of the following categories, Mayors/County Heads are entitled to either cancel a permit of business or order suspension of business, in whole or in part, within 6 months of the infraction. When a contractor falls under category 1) or 2), Mayors/County Heads must cancel the permit.

1) Anyone who falls under category 1), 2), 3), or 5) in Article 12

2) Anyone who has obtained a permit of business by fraudulent or unlawful means

3) Anyone who fails to start a business within 1 year after gaining permission or suspends the business for more than 1 year without justifiable reason

4) Anyone who cuinot meet the permit standards specified in Article 11-1

5) Anyone who violates the stipulations of Article 6-1

6) Anyone who violates the Law or any orders pursuant to this Law.

2. When Mayors/County Heads intend to cancel a permit of business from a disposal contractor of domestic waste as a corporation due to the Number 5) of Article 12, they shall allow more than 6 months for changing the executive(s).

#### Article 14. (Night Soil Treatment and Refuse Disposal Facilities)

1. Night soil treatment facilities and refuse disposal facilities shall be constructed based on the master plan for domestic waste disposal stipulated in Article 8 and the technical standards for construction specified in the MOHSA Order.

2. Anyone who intends to construct a night soil treatment facility or a refuse disposal facility shall obtain a permit of construction from the AE pursuant to the MOHSA Order. Excluded is anyone who applies for or has obtained a permit of night soil treatment or refuse disposal business pursuant to Article 11-1. An approval is also required for changes of important licensed items stipulated in the MOHSA Order.

3. The constructor or caretaker of a night soil treatment facility or a refuse disposal facility shall maintain and manage the facility in accordance with the technical standards specified in the MOHSA Order.

4. The AE or Mayors/County Heads are entitled to order the constructor or caretaker to make necessary improvements or to suspend the use of the facility for a specified period when it is judged that the operation and maintenance of the night soil treatment facility or the refuse disposal facility not to be in compliance with Articles 14-1 and 14-3.

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## Article 15 (Construction of Sewage Treatment Facility and Night Soil Treatment Tank)

1. Sewage treatment facilities shall be provided individually or jointly for buildings and other facilities larger than the sizes stipulated in the Presidential Decree, in public residential areas, or in other areas stipulated in the Presidential Decree.

2. Night soil treatment tanks shall be provided for buildings and other facilities stipulated in the Presidential Decree.

3. Anyone who intends to construct facilities for livestock breeding, shall also construct a livestock wastewater treatment facility, as stipulated in the Presidential Decree.

4. Anyone who intends to construct a sewage treatment facility, night soil treatment tank, or livestock wastewater treatment facility, pursuant to the provisions of Articles 15-1 through 15-3, shall report in advance to the Mayors/County Heads in compliance with the stipulations of the MOHSA Order.

5. The builder shall, upon completion of facilities such as sewage treatment facilities, night soil treatment tanks, or livestock wastewater treatment facilities, have the facilities inspected by the Mayors/County Heads, as prescribed by the MOHSA Order.

6. A business establishment with pollution control facilities that treats combined night soil, sewage, or livestock wastewater, and wastewater produced from the same business establishment, shall be regarded as having a sewage treatment facility, night soil treatment tank, or livestock wastewater treatment facility as stipulated in Articles 15-1 through 15-3. Such pollution control facilities shall comply with Article 15-2 of the Environmental Conservation Law and be subject to a technical examination by the Environmental Technical Review Committee pursuant to the provisions of Article 15-4 of the same Law.

7. The technical standards and other necessary matters for construction of sewage treatment facilities, night soil treatment tank, or livestock wastewater treatment facilities pursuant to Articles 15-1 through 15-3 shall be specified in the MOHSA Order.

Article 16. (Operation and Maintenance of Sewage Treatment Facilities, Night Soil Treatment Tanks, etc.)

1. The owners or operators of sewage treatment facilities, night soil treatment tanks, or livestock wastewater treatment facilities shall operate and maintain the facilities, including cleaning inside of them, in accordance with the standards for operation and maintenance specified in the MOHSA Order.

2. When the owners or operators of sewage treatment facilities, night soil treatment facilities or livestock wastewater treatment facilities do not maintain the facilities appropriately in accordance with the standards for maintenance specified in the MOHSA Order, Mayors/County Heads are entitled to order improvement, restriction, or prohibition of the use of the concerned facilities, or to address other necessary measures to owners or operators.

3. In case where the owners or operators of sewage treatment facilities, night soil treatment facilities, or livestock wastewater treatment facilities stipulated in the Presidential Decree are notified to pay a fine pursuant to the provisions of Article 45 due to the default of cleaning inside of the facilities, Mayors/ County heads may charge the expense to the owners or operators after having the facility cleaned by the a third party.

4. Mayors/County Heads are entitled to have their personnel enter buildings or any other facilities where sewage treatment facilities, night soil treatment facilities, livestock wastewater treatment facilities are located, and inspect the quality of the facilities' management. The personnel who enters and inspects the facility must carry an identification card and must show the identification to the person concerned.

## Article 17. (Design and Construction Business for Domestic Waste Disposal Facilities)

1. Only those designers and builders stipulated in Article 17-3 are entitled to design and construct night soil treatment facilities, refuse disposal plants, or sewage treatment facilities. However, designers and builders in one of the following categories are excluded, if they have obtained a permit of business from the AE pursuant to the stipulation of the MOHSA Order:

1) A business owner who constructs a night soil treatment facility or refuse disposal plant to dispose of night soil or refuse discharged from his own business

2) Any builder who constructs a sewage treatment facility in his own buildings

3) In the cases stipulated in the MOHSA Order.

2. For the exclusions in Article 17-1, the AE may appoint a qualified person, specified in the MOHSA Order, as a construction supervisor.

3. Anyone who intends to design or construct a night soil treatment facility and refuse disposal plant as a business shall register his business with the AE. In this case, the businessman shall fulfill the requisites for facilities, equipment, and technical abilities as stipulated in the Ministry of Health and Social Affairs Ordinance. The same shall be applied to change the registered items stipulated in the MOHSA Order.

4. Anyone who intends to design or construct night soil treatment facility and livestock wastewater treatment facility as a business shall register with the Mayors/County Heads of his business establishment the fulfillment of the requisites for facilities, equipment, and technical abilities, as stipulated in the Ministry of Health and Social Affairs Ordinance. An approval is also required to change the registered items prescribed in the MOHSA Order.

5. Article 12 applies to the registration of design and construction business pursuant to Articles 17-3 and 17-4.

## Article 18. (Manufacturer of Night Soil Treatment Tanks)

1. Any person who intends to manufacture night soil treatment tanks as a business shall register with the AE to fulfill the requisites for facilities, equipment, and technical abilities as stipulated in the Ministry of Health and Social Affairs Ordinance. An approval is also required to change the registered items prescribed in the MOHSA Order.

2. Article 12 is applied to the registration of a manufacturing business of night soil treatment tanks pursuant to Article 18-1.

3. Anyone who manufactures night soil treatment tanks shall meet the technical standards for structure, size, and performance specified in the MOHSA Order.

#### Article 19. (Cancellation of Registration, etc.)

1. The AE or Mayors/County Heads are entitled to either cancel the registration or order suspension of a whole or partial business, for not more than 6 months from the time when the designer or builder mentioned in Articles 17-3 and 17-4, or the manufacturer pursuant to the stipulation of Article

18 of night soil treatment tanks will fall under one of the followings categories. In the cases of numbers 1) or 2) below, however, they must cancel the registration of business.

1) In the case where Article 12, Numbers 1), 2), 3), or 5) is applied pursuant to Articles 17-5 and 18-2

2) Anyone who registers business by fraudulent or unlawful means

3) Anyone who fails to start business within 1 year after registration, or who suspends the business continually more than 1 year without justifiable reason

4) Anyone who cannot meet the standards specified in Articles 17-3 and 17-4 or Article 18-1

5) Anyone who rents or leases his registration certificate to any other person

6) Anyone who either performs an unreliable design or construction work or subcontracts the whole construction work to other contractors

7) Any manufacturer of night soil treatment tank who could not meet the technical standards specified in Article 18-3

8) Anyone who violates the Law or any orders pursuant to this Law.

2. Article 13-2 is applied to the cancellation of registration or suspension of business prescribed in the Number 1) of Article 19-1.

# Article 20. (Continuation of Construction Works by the Designer or Builder Whose Registration Is Canceled or Whose Business Is Suspended)

1. Anyone whose business registration is canceled or whose business is suspended by Article 19 may continue to conduct business only for the construction work under the contract to be executed prior to the cancellation or suspension. In this case, the AE is entitled to designate a qualified person, stipulated in the MOHSA Order, as a reviewer to control and supervise the construction work concerned.

2. Anyone who conducts the design or construction pursuant to the provisions of Article 20-1, shall be considered a designer or builder stipulated in this Law until the completion of the construction work concerned.

#### **CHAPTER 3. INDUSTRIAL WASTE**

#### Article 21. (Duties of Industrial Waste Dischargers, etc.)

1. Any businessman producing industrial waste (hereinafter referred to as "businessman") shall be required to take the following actions:

1) To dispose appropriately of industrial waste resultant from business activities

2) To reduce the amount of industrial waste generated from the production lines as much as the businessman can by means of technical improvement, recycling, and reuse

3) To dispose of industrial waste and domestic waste separately.

2. The businessman shall report to Mayors/Governors in compliance with the prescription in the Ordinance of the Ministry of Health and Social Affairs. However, the businessman who has obtained a permit for installation of pollution discharge facilities pursuant to the provisions of Article 15 in Environment Preservation Law is excluded.

3. The businessman shall record the amount of production, recycling or reuse, and disposal of industrial waste, and shall keep it in compliance with the stipulation of the MOHSA Order.

### Article 22. (Re-collection of Industrial Waste)

1. In the case of materials, containers or products used in the process of manufacturing or processing that come to be waste in the course of marketing of goods, the businessman shall endeavor to facilitate the re-collection and disposal of the waste.

2. The AE or Mayors/Governors are entitled to announce appropriate re-collection and disposal methods of waste, or to order the waste handler to take necessary measures in the case of either products, materials, or containers mentioned in Article 22-1 that contain specific hazardous substances specified in the Number 13) of Article 2 in the Environment Preservation Law, or products that are manufactured, processed, or marketed in large quantities. When Mayors/Governors intend to take the actions mentioned above, they shall obtain a permit from the AE.

#### Article 23. (Disposal of Industrial Waste)

1. The businessman shall dispose of industrial waste produced from the places of business by himself. The businessman may entrust the following third parties with disposal of his industrial waste:

Anyone who has obtained a license with respect to the provisions of Article 24-1 (hereinafter referred to as "handler of industrial waste disposal"); anyone who disposes of another's industrial waste for the purpose of recycling or reuse pursuant to the stipulation of Article 24-2; anyone who has constructed or operated industrial waste disposal plants.

2. Any person who intends to dispose of other's industrial waste for the purpose of recycling or reuse, which shall be prescribed by the MOHSA Order, shall report to Mayors/Governors.

3. The National Government, Cities/provinces or any other person stipulated in the MOHSA Order is entitled to construct and operate regional industrial waste disposal plants (hereinafter referred to "public industrial waste disposal plant").

4. A consignment fee and other necessary matters for a consignment disposal by public industrial waste disposal plants pursuant to Article 23-3 shall be stipulated by the MOHSA Order.

#### Article 24. (Industrial Waste Handler)

1. Any person who intends to dispose of industrial waste as business shall obtain a permit for each type of business from the AE. When applying for a permit, the handler shall fulfill all requisites for facilities, equipment, and technical abilities prescribed by the MOHSA Order. The same is applied when the handler intends to change the permit conditions prescribed by the MOHSA Order.

2. The AE is entitled to define the business area for respective handlers of industrial waste disposal or to impose necessary conditions.

3. The AE is entitled to restrict permits for business pursuant to Article 24-1, taking into considering the amount of industrial waste generation and the geographical distribution of handlers.

4. Articles 12 and 13 shall be applied to permitting and cancellation of conditions prescribed in Article 24-1.

#### Article 25. (Report on Disposal of Industrial Waste)

The businessman, industrial waste handler, or other industrial waste disposer who intends to dispose of industrial waste, shall report the details related to the disposal of industrial waste to the Mayors/Governors in the area where the waste handler conducts business. In the case where the waste handler disposes of industrial waste in a different jurisdictional areas from where the industrial waste is produced, the waste handler shall report to Mayors/Governors of both jurisdictions for waste generation and disposal.

#### Article 26. (Industrial Waste Disposal Plants)

1. Industrial waste disposal plants shall be constructed in accordance with the master plan for industrial waste disposal under the provisions of Article 8 and the technical standards for construction specified in the MOHSA Order.

2. Any person who intends to construct industrial waste disposal plants (excluding anyone who has already obtained a license for the industrial waste disposal business, or the handler of industrial waste disposal pursuant to Article 24) shall obtain a permit from the AE according to the stipulation in the MOHSA Order. The same is applied to change the permit conditions stipulated in the MOHSA Order.

3. The builder or caretaker of industrial waste disposal plants shall operate and maintain the plants in accordance with the operation and maintenance standards specified in the MOHSA Order.

4. The AE is entitled to order the builder or caretaker to improve the plant or to suspend the use of the plant for a certain period of time when it recognizes that the operation and maintenance of the facilities are not in conformance with the procedures mentioned in Articles 26-1 through 26-3.

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# **CHAPTER 4. GUIDANCE AND SUPERVISION OF BUSINESSMEN**

#### Article 27. (Technical Manager)

1. Anyone who constructs or operates industrial waste disposal plants prescribed in the Presidential Decree shall appoint a technical manager in charge of technical works for operation and maintenance of the facilities. However, anyone who solely does technical management of the plants, or anyone who has made a contract for the operation and maintenance of the plants with a qualified third party as stipulated in the Presidential Decree, is excluded.

2. The qualification of a technical manager and requirements for a third party contractor pursuant to Article 27-1 shall be stipulated by the Presidential Decree.

# Article 28. (Training for Personnel in Charge of Industrial Waste Disposal)

1. The AE may train the technical personnel who are in charge of industrial waste disposal prescribed in the Presidential Decree to improve their qualifications.

2. The training requirements under the provisions of Article 28-1, shall be stipulated by the MOHSA Order.

#### Article 29. (Keeping and Maintaining Records)

The handler of the domestic waste disposal prescribed in Article 10-4 and Article 11, the handler of industrial waste disposal stipulated in Article 23-2, the builder or operator of public disposal plants stipulated by Article 23-3, and the handler of industrial waste disposal stipulated by Article 24 shall keep a record book and record collection place, indicating the amount of collection and disposal of waste.

#### Article 30. (Report on the Suspension and Cessation of Business)

The domestic waste handler with respect to Article 11-1, the designer and builder prescribed in Articles 17-3 and 17-4, the manufacturer of night soil treatment tanks under Article 18-1, and the industrial waste handler pursuant to Article 24-1 shall report the temporary closure, reopening, or closure of his business to the government authority where the permit or registration had been obtained.

#### Article 31. (Report and Inspection)

1. The AE, Mayors/Governors, or Mayors/County Heads are entitled to demand, within the limits necessary for the executing this Law, the persons prescribed in Article 30, or the waste handler stipulated by Article 10-4 or 23-2, presentation of necessary reports on production, disposal, recycling and reuse of waste, operation and maintenance of waste disposal plants, design and construction of domestic waste disposal plants, or manufacture of night soil treatment tanks. They are also entitled to require their staffs to enter the offices or places of business and inspect the related documents, facilities and equipment.

2. The staff member who enters and inspects pursuant to Article 31-1 must carry an identification card that proves his status and must present the identification to a person concerned.

#### Article 32. (Order of Correctional Measures on Waste Disposal)

The AE, Mayors/Governors, or Mayors/County Heads are entitled to order anyone who disposes of waste improperly, with reference to the standards and methods specified in Article 7, to take necessary measures in order to eliminate or prevent hazards.

#### Article 33. (Hearing)

When the AE, Mayors/Governors, or Mayors/County Heads intend to cancel the permit or registration of business, or suspend business operation pursuant to the provisions of Article 13, Article 19, or Article 24-4, they shall give the person concerned, his representative, or any other person who has an interest in the matter an opportunity to state his opinion. A hearing is excluded, however, when the person concerned, his representative, or any other person who has an interest in the matter does not respond without any justifiable reasons, or when the hearing cannot be arranged due to unknown address of the person mentioned above.

### **CHAPTER 5. SUPPLEMENTARY PROVISIONS**

## Article 34. (Request for Import Restrictions on Industrial Waste)

The AE may request the Minister of Commerce and Industry to restrict the import of industrial waste when it is deemed necessary for environmental preservation.

### Article 35. Restriction on Breeding of Livestock)

1. When Mayors/County Heads deem it necessary for the preservation of the human environment and public health, they are entitled to restrict livestock breeding for a certain area, as may be stipulated by the regulations of municipalities concerned.

2. Mayors/County Heads are entitled to order breeders of livestock to relocate cattle sheds or to take necessary measures to eliminate or prevent the hazard when it is deemed to cause a serious hazard to the preservation of the human environment due to the breeding of livestock. When the proper authority intends to order relocation of cattle sheds, that authority shall allow more than 6 months for preparing relocation, and shall take proper actions such as arrangement of new sites for the livestock sheds.

### Article 36. (Restrictions on Use of Night Soil)

1. No one is allowed to use night soil as a fertilizer in specially clean areas, unless night soil is treated in accordance with the standards specified in the MOHSA Order.

2. When Mayors/County Heads deem it necessary for farmers to use night soil as a fertilizer, they shall order farmers to install night soil treatment facilities that can meet the standards mentioned in Article 36-1 or to take any necessary measures.

#### Article 37. (Coordination of Waste Disposal Business)

In cases where the AE or Governor coordinates waste disposal works between local governments pursuant to the provisions of Articles 14-3 or 14-4, it may recommend local governments concerned to use waste disposal facilities such as waste landfill sites jointly when necessary, and to devise necessary supporting measures to preserve and improve human environment of the area where the waste disposal facilities are located. The heads of the local governments concerned shall accept the recommendations unless there is reason to refuse.

#### Article 38. (Government Subsidy)

The National Government may aid local governments financially by paying whole or part of the following expenses within the limit of available budget.

1) Expenses that are required for construction of domestic waste disposal plant

2) Expenses that are required for construction of facilities disposing of industrial waste that contain specific hazardous substances specified in Article 2, Number 13) of the Environmental Preservation Law.

#### Article 39. (Report on the Results of Waste Disposal)

Mayors/Governors shall report the results of waste disposal in his jurisdictional areas to the AE each year by the end of February of the following year, as stipulated by the MOHSA Order.

#### Article 40. (Fees for License, Registration, etc.)

Any person who intends to apply for license or registration of business pursuant to Articles 11-1, 17-3 or 17-4, 18-1, and 24-1 shall pay a fee, which shall be prescribed by the MOHSA Order.

## Article 41. (Delegation and Consignment of Authority or Duty)

1. The authority of the Administrator of Environment of Administration may be delegated in part to Mayors/Governors or to the head of the regional environmental agencies, as stipulated by the Presidential Decree.

2. The head of the national or local government is entitled to consign the operation and maintenance of the facilities to a qualified person, pursuant to the stipulation of the MOHSA or regulation of the concerned local government, when it is deemed necessary for the effective operation and maintenance of waste disposal plants, waste storage sites, public toilets, or any other public sanitary facilities that were constructed pursuant to this Law.

## Article 42. (Enforcement Decree)

Specific implementation requirements of this Law shall be prescribed in the Presidential Decree.

# **CHAPTER 6. PENAL PROVISIONS**

#### Article 43. (Penalties)

1. Anyone who falls under one of the following categories shall be imprisoned for less than 2 years or fined less than 10,000,000 won:

1) Anyone who conducts a business of night soil disposal service or refuse disposal service without license pursuant to the provisions of the first part of Article 11-1

2) Anyone who conducts night soil treatment service or refuse disposal service without a permit pursuant to the provisions of the first part of Article 14-2

3) Anyone who is required to install a sewage treatment facility but does not install one under Article 15-1

4) Anyone who designs or constructs night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities as a business without registration required by the first part of Article 17-3

5) Anyone who manufactures night soil treatment tanks as a business without registration pursuant to the provisions of Article 18-1

6) Anyone who undertakes to dispose of industrial waste as a business without permit pursuant to the provisions of the first part of Article 24-1

7) Anyone who constructs industrial waste disposal plants without a permit pursuant to the provisions of the first part of Article 26-2.

2. Anyone who falls under one of the following categories shall be imprisoned for less than 1 year or fined less than 5,000,000 won:

1) Anyone who violates the provisions of Article 6-2

2) Anyone who obtains a permit pursuant to the provisions of the first part of Article 11-1 by fraudulent or unlawful means

3) Anyone who collects and transports night soil or refuse or cleans night soil treatment tanks as a business without night soil or waste handler permit conditions pursuant to the provisions of the first part of Article 11-1

4) Anyone who changes his permitted items without a permit for modification pursuant to the provisions of the latter part of Article 11-1

5) Anyone who changes his permitted items without a permit for modification pursuant to the provisions of the latter part of Article 14-2

6) Anyone who registers a business pursuant to the provisions of the first part of Article 17-3 by fraudulent or unlawful means

7) Anyone who changes the registered items without registration for change pursuant to the provisions of the latter part of Article 17-3

8) Anyone who undertakes to design or construct night soil treatment tanks or livestock wastewater treatment facilities as a business without registration pursuant to the provisions of the first part of Article 17-4

9) Anyone who registers a business of manufacturing night soil treatment tanks pursuant to the provisions of Article 18-1 by fraudulent or unlawful means

10) Anyone who changes the registered items without registration for change pursuant to the provisions of the latter part of Article 18-1

11) Anyone who obtains a permit of business of industrial waste disposal pursuant to the provisions of Article 24-1 by fraudulent or unlawful means

12) Anyone who changes the permit conditions for industrial waste handling without a permit for change pursuant to the provisions of the latter part of Article 24-1

13) Anyone who changes the permitted items without a permit for change pursuant to the provisions of the latter part of Article 26-2

14) Anyone who violates the orders pertaining to Article 32.

3. Anyone who falls under one of the following categories shall be imprisoned for less than 6 months or fined less than 3,000,000 won:

1) Anyone who disposes of waste in violation of the provisions of Article 7

2) Anyone who violates the provisions of Article 10-3

3) Anyone who disposes of domestic waste for the purpose of recycling or reuse without reporting pursuant to the provisions of Article 10-4

4) Anyone who obtains a business license of night soil collection and transportation, domestic waste collection and transportation, and night soil treatment tank cleaning pursuant to the provisions of the first part of Article 11-1 by fraudulent or unlawful means

5) Anyone who changes the licensed items without a permit for the business of night soil collection and transportation, domestic waste collection and transportation, and night soil treatment tank cleaning pursuant to the provisions of the latter part of Article 11-1

6) Anyone who charges a fee in violation of the provisions of Article 11-5

7) Anyone who conducts a business during the period of business suspension pursuant to the provisions of Article 13 (including the case where Article 24-4 is applied)

8) Anyone who violates the provisions pertaining to Article 14-4

9) Anyone who is required to install night soil treatment tanks or livestock wastewater treatment but has not install them according to Article 15-2 or 15-3

10) Anyone violating orders pertaining to the sewage treatment facilities of Article 16-2

11) Anyone who registers a business of design and construction of night soil treatment tanks or livestock wastewater treatment facilities pursuant to the provisions of the first part of Article 17-4 by fraudulent or unlawful means

12) Anyone who changes the registered items without registration for change pursuant to the provisions of the latter part of Article 17-4

13) Anyone who conducts a business during the suspension period of business stipulated in Article 19-1

14) Anyone who fails to report with respect to Article 21-2

15) Anyone who violates the orders pertaining to Article 22-2

16) Anyone who disposes of industrial waste for the purpose of recycling or reuse without report pursuant to the provisions of Article 23-2

17) Anyone who violates the orders pertaining to Article 26-4

18) Anyone who does not appoint a technical manager pursuant to the provisions of Article

27

19) Anyone who violates the orders pertaining to Article 35-2.

#### **Article 44. (Concurrent Penalty Provisions)**

When a representative of a corporation or a substitute for an employer, or an employee of a corporation or a private enterprise commits an unlawful act against the provisions of Article 43 with regard to the business of the corporate or the private enterprise, the penalties of fine under the respective Paragraphs of Article 43 shall be imposed on the corporate or the private enterprise in addition to the punishment of the person who has committed such violations.

#### Article 45. (Fines)

1. Anyone who falls under one of the following categories shall be fined less than 1,000,000 won:

1) Anyone who discharges domestic waste in violation of the stipulations of Article 6-1

2) Anyone who violates the restriction or the conditions of business stipulated in Article 11-4 or 24-2

3) Anyone who violates the orders pursuant to Article 16-2 pertaining to night soil treatment tank or live stock wastewater treatment facilities

4) Anyone who refuses, avoids, or interferes with the inspection stipulated in Article 16-4 or 31

5) Anyone who does not report or makes a false report as stipulated in Article 31

6) Anyone who sells night soil treatment tanks that are manufactured by a person without registration as stipulated in Article 18-1

7) Anyone who violates the stipulations of Articles 21-1.3, 21-3, 25, 29, or 30.

2. Anyone who falls under one of the following categories shall be fined less than 500,000 won:

1) Anyone who violates the stipulation of Article 9-3.1

2) Anyone who does not provide reports as stipulated in Article 15-4

3) Anyone who operates sewage treatment facilities, night soil treatment tanks or live stock wastewater treatment facilities without an inspection of completion of construction as stipulated in Article 15-5

4) Anyone who maintains sewage treatment facilities, night soil treatment tanks, or live stock wastewater treatment facilities that have treatment capacities of 10m<sup>3</sup> or more in violation of the maintenance standards specified in Article 16-1

5) Anyone who uses human excreta as a fertilizer in violation of Article 36-1.

3. Anyone who maintains a wastewater treatment facility, a night soil treatment tank, or livestock wastewater treatment facility that has a capacity of less than  $10m^3$  in violation of the technical standard specified in Article 16-1 shall be fined less than 200,000 won.

Article 46. (Imposition and Collection of Fines)

1. The AE, Mayors/Governors, or Mayors/County Heads are entitled to charge or collect fines stipulated in Article 45, which shall be prescribed by the Presidential Decree.

2. Anyone who does not agree with the imposition of fine pursuant to the stipulation of Article 46-1 is entitled to file a rebuttal with the AE, Mayors/Governors, or Mayors/County Heads concerned, within 30 days from the day of receipt of the notification of imposition.

3. Upon receiving a rebuttal for the imposition of fine pursuant to Article 46-1, the AE, Mayors/Governors, or Mayors/County Heads shall refer the rebuttal to the court concerned. The court shall judge the imposition in a hearing procedure.

4. In those cases where a plaintiff does not file a rebuttal, and still does not pay an imposed fine, according to the provision of Article 46-2, the AE, Mayors/Governors, or Mayors/County Heads may collect the fine by the national and local tax procedures

## ADDENDA

### Article 1. (Enforcement Date)

This Law shall be implemented on April 1, 1987. However, the stipulation of Article 27 shall be effective 1 year after the date of the implementation of this Law.

#### Article 2. (Abrogation and Amendment of Other Laws)

1. With the enforcement of this Law, the Garbage Disposal Law shall be abrogated.

2. Parts of Construction Law shall be amended as follows:

1) "Reporting on construction of wastewater treatment facility stipulated in Article 15 of the Garbage Disposal Law and night soil treatment tank stipulated in Article 16 of the same Law," in the Number 4) of Article 5-6 of the Construction Law, shall be amended to "reporting on construction of sewage treatment facility or night soil treatment tank prescribed in Article 15-4 of the Waste Management Law."

2) In Article 7-6, Number 1) of the Construction Law, "the inspection of completion of sewage treatment facility or night soil treatment tank stipulated in Article 18 of the Wastewater Treatment Law" shall be amended to "the completion inspection on sewage treatment facility or night soil treatment tank stipulated in Article 15-4 of the Waste Management Law."

3) In Article 53-4, "Article 19 of the Sewage Disposal Law" shall be amended to "Article 17 of the Waste Management Law."

3. Part of the Parasite Disease Prevention Law shall be amended as follows:

"By the provisions of Article 11-1 in the Garbage Disposal Law" shall be amended to "by the provisions of Article 36-1 in the Waste Management Law."

4. Part of the small Business Establishment Support Law shall be amended as follows:

In Article 22-2, Number 3), "the report on construction of wastewater treatment facility prescribed in Article 15 of the Garbage Disposal Law or night soil treatment tank prescribed in Article 16 of the same Law and Article 18 of the same Law" shall be amended to "the report on construction of wastewater treatment facility or night soil treatment tank prescribed in Article 15-4 of the Waste Management Law and Article 15-5 of the same Law."

5. When there is any Law that quotes stipulations from the Garbage Disposal Law or its stipulations or Chapter 8 of the old Environment Preservation Law (Articles 49-3 through 52-3) at the time of enforcement of this Law and if there is equivalent regulation in this law, it shall be regarded as the quotations from this Law or its provisions concerned.

### Article 3. (Interim Measures on Business Permission)

Anyone whose business has been permitted or registered for the classifications specified in the left columns in the following table pursuant to the Garbage Disposal Law and the Environmental Preservation Law at the time of enforcement of this Law, shall be regarded as one who has been licensed or registered specified in the right columns of the same table by this Law. In this case, the AE is entitled to limit business areas of, or impose necessary conditions on the waste handlers.

# Article 4. (Actions Based on the Garbage Disposal Law and Interim Measures on Continuing Actions)

All granting of permits and any administrative measures, applications, reports, or other actions made by the provisions of the Garbage Disposal Law and Chapter 8 of the old Environment Preservation Law (Articles 49-3 through 52-3) before the implementation of this Law shall be regarded as valid actions pursuant to this Law.

#### Article 5. (Interim Measures on Penalty)

Penalties for violation of the Garbage Disposal Law before the time of enforcement of this Law shall be applied by the old provisions.

# Table A1

# Permitting Correspondence Between Old and New Law

Old Law	New Law	
Permit or registration by the Garbage Disposal Law or Environmental Preservation Law	Permit or registration by this Law	
Permit of garbage disposal business pertaining to Article 11-1 of the Garbage Disposal Law	Permit of domestic waste handler pertaining to Article 11-1	
Registration of design and construction of final treatment facility pertaining to Article 19-1 of the Garbage Disposal Law	Registration of design and construction of night soil treatment facility pertaining to Article 17-3	
Registration of design and construction of night soil treatment tank pertaining to Article 19-2 of the Garbage Disposal Law	Design and construction business of night soil treat- ment tanks pertaining to Article 17-4	
Registration of night soil treatment tank manufac- turing pertaining to Article 20 of the Garbage Disp- osal Law	Registration of night soil treatment tank manufac- turing business pertaining to Article 18-1	
Permits for industrial waste disposal business per- taining to Article 50-1 of the Environmental Preser- vation Law	License of industrial waste disposal business per- taining to Article 24-1	

# MOHSA ORDER TO IMPLEMENT THE WASTE MANAGEMENT LAW (MOHSA Order No. 802, Effective 30 May 1987)

# **CHAPTER 1. GENERAL PROVISIONS**

## Article 1. (Purpose)

The purpose of this regulation is to stipulate the items delegated in and necessary for implementing the Waste Management Law and Presidential Decree No. 12119.

#### Article 2. (Types of Industrial Waste)

"Industrial waste," prescribed in Article 2.3.) of the Waste Management Law (hereinafter referred to as "the Law") shall be defined in the Annex to this Order.

#### Article 3. (Night Soil Treatment Facilities)

1. A "night soil treatment facility," prescribed in Article 2.4.) of the Law refers to any of the following facilities with a treatment capacity of 5 kiloliters (kl) per day or greater:

1) An anacrobic treatment facility composed of intake, detention basin, anacrobic digestion facility, biological treatment facility (i.e., trickling filter, oxidation basin, and activated sludge process), disinfection facility, dewatering facility, and other auxiliary facilities

2) An aerobic treatment facility composed of intake, detention basin, aerobic digestion or oxidation treatment facility, biological treatment facility, disinfection facility, dewatering facility, and other auxiliary facilities

3) A biological or physico-chemical treatment facility composed of intake, detention basin, biological treatment facility, chemical treatment facility, disinfection facility, dewatering facility and other auxiliary facilities

4) An oxidation pond composed of intake, detention basin, dilution control device, oxidation basin, and other auxiliary facilities

5) Any other facilities which the Environmental Administration (EA) declares to be equivalent to those listed in paragraphs 1) through 4) of this Article.

Article 4. (Night Soil Treatment Tanks)

1. A "night soil treatment tank," stipulated in Article 2. of the Law refers to one of the following facilities:

1) A facility that treats diluted night soil by sedimentation and digestion

2) A facility that treats diluted night soil by digestion, oxidation, and sedimentation

3) A facility that treats diluted night soil by sedimentation and digestion, or by oxidation and leaching

4) A facility which the EA declares to be equivalent to those listed in paragraphs 1) through3) of this Article.

Article 5. (Refuse Disposal Facilities)

1. A "refuse disposal facility," stipulated in Article 2.6.) of the Law refers to one of the following facilities which dispose of refuse:

1) A landfill facility with an area of 3300  $m^2$  or more, or with a landfill capacity of 10,000  $m^3$  or more

2) An incineration facility with a capacity of 5 tons per day or more

3) A recycle and separation facility (including Refuse Derived Fuel [RDF] facility) with a capacity of 5 tons per day or more

4) A composting facility with a capacity of 5 tons per day or more

5) A pretreatment facility (that prepares material for landfill or incineration), with a capacity of 5 tons per day or more, to be announced by the EA.

#### Article 6. (Domestic Wastewater Treatment Facilities)

1. A "domestic wastewater treatment facility," prescribed in Article 2.7.) of the Law, refers to one of the following facilities:

1) An extended aeration process facility with pretreatment facilities, extended aeration tank, settling tank, disinfection chamber, and other auxiliary components

2) A standard activated sludge facility with pretreatment facilities, activated sludge tank, settling tank, disinfection chamber, and other auxiliary components

3) A contact oxidation process with pretreatment facilities, contact oxidation tank, settling tank, disinfection chamber, and other auxiliary components

4) A trickling filter with pretreatment facilities, trickling filter, settling tank, disinfection chamber, and other auxiliary components

5) A contact stabilization process with pretreatment facilities, contact tank, sludge re-aeration tank, settling tank, disinfection chamber, and other auxiliary components

6) A rotating biological contactor (RBC) process with pretreatment facilities, rotating disk contactor, settling tank, disinfection chamber, and other auxiliary components

7) An Imhoff tank process with pretreatment facilities, Imhoff tank, supplementary treatment, settling tank, disinfection chamber, and other auxiliary components

8) Any other facilities which the EA declares to be equivalent to those listed in paragraphs1) through 7) of this Article.

#### Article 7. (Industrial Waste Disposal Facilities)

1. An "industrial waste disposal facility," stipulated in Article 2.8.) of the Law, refers to any one or combination of the following facilities:

1) A landfill facility with an area of 1650  $m^2$  or more, or with landfill capacity of 5000  $m^3$  or more

2) An incineration facility with a capacity of 1 ton per day or more

3) An aerobic or anaerobic composting facility with a capacity of 1 ton per day or more

4) A neutralization facility with a disposal capacity of 1 ton per day or more

5) A melting facility with a disposal capacity of 1 ton per day or more

6) An oil and water separation facility with a disposal capacity of 1 ton per day or more

7) A cement solidification facility with a capacity of 1 ton per day or more

8) Any facilities which the EA announces to be equivalent to those listed in paragraphs 1) through 7) of this Article.

## Article 8. (Livestock Wastewater Treatment Facilities)

1. A "livestock wastewater treatment facility," stipulated in Article 2.9.) of the Law, refers to one of the following facilities:

1) An anaerobic digestion facility with anaerobic digester and other auxiliary components

2) An aerobic oxidative treatment facility with oxidation equipment and other auxiliary components

3) A composting facility with an aerobic or anaerobic composting unit and other auxiliary components

4) An oxidative treatment facility with aerobic oxidation in soil, and other auxiliary components

5) An oxidative treatment facility with aerobic oxidation equipment using biomass attachment media, and other auxiliary components

6) Facilities that the EA announces to be equivalent to those listed in paragraphs 1) through 5) of this Article.

#### Article 9. (Standards for Installation and Maintenance of Public Restrooms)

1. The installation standards of Public restrooms which the Mayor of the special city of Seoul, Mayors of cities under direct control of the National Government, Mayors or County heads (hereinafter referred to as "Mayors/County Heads"), pursuant to Article 5.3. of the Law, are as follows:

1) Public restrooms shall be installed in convenient places for public use, and signs shall be posted conspicuously.

2) Public restrooms must contain flush toilets, except when water and sewer systems are inadequate, or where flush toilets may cause water pollution.

3) Public restrooms must have separate entrances for men and women.

4) Restroom area shall be  $33 \text{ m}^2$  or more. Each restroom must have at least eight toilet bowls (three for men, five for women) and at least five urinals or the equivalent. Excluded are those cases where public restroom use is relatively slight, or where it is difficult to secure enough space for the installation of restrooms.

5) The dimensions of a partition for a toilet bowl (hereinafter referred to as a toilet stall) must be 85 cm by 115 cm or more, and 85 cm by 130 cm or more for a flush toilet.

6) A toilet stall must be equipped with a place for personal belongings or coat hangers.

2. The standards for operation and maintenance of public restrooms, pursuant to Article 5.3. of the Law, are as follows:

1) A manager must be appointed to check restrooms regularly and to maintain them sanitarily.

2) Restrooms must be cleaned three times or more per day.

3) Both the inside and outside of public restrooms must be sanitized three times or more per week from April to September, and one time or more per week from October to March, to prevent odors and breeding of rats, flies, mosquitos, or other vermin.

## Article 10. (Refuse Container for Public Use)

1. Refuse containers for public use, pursuant to Article 5.3. of the Law shall be manufactured of metal or other water-resistant, heat-resistant, and durable materials.

2. The requirements for installation, operation and maintenance of refuse containers for public use, pursuant to Article 10.1., such as structure, specification, shape, location, and distance between the containers shall be stipulated by local government regulations, according to amount of refuse generation, traffic conditions, and aesthetic considerations.

#### Article 11. (Refuse Transfer Station [RTS])

1. The standards for installation, operation and maintenance of refuse transfer stations, pursuant to Article 5.3. of the Law, are as follows:

1) Movable containers shall be provided to prevent accumulation of refuse in the RTS. Excluded are those cases when it is difficult to equip movable containers due to space limitations or road conditions.

RTS.

2) Fences and sprinklers shall be provided to keep refuse or dust from scattering from the

3) The RTS shall be sterilized once or more per day from April to September and once or more per week from October to March, to prevent the emission of odors or the breeding of rats, flies, mosquitos, or other vermin.

4) The requirements for location, size, etc., for the installation, operation, and maintenance of the RTS shall be stipulated by local government regulations according to the amount of waste generation and aesthetic considerations.

#### Article 12. (Standards and Methods for Waste Disposal)

1. The standards and methods for disposal of waste that can be recycled or reused (hereinafter referred to as "recyclable waste"), as stipulated in Article 7. of the Law, shall be as follows:

1) Recyclable waste shall be collected and transported separately from nonrecyclable waste. Methods for collection and transportation are stipulated in Articles 12.2. through 12.5.

2) Where air and water pollutants are produced in recycling or reuse of recyclable waste, those pollutants shall be discharged in accordance with the emission standards specified in Article 14. of the Environment Preservation Law.

3) Nonrecyclable waste produced in the process of the recycling or reuse of waste shall be disposed of in accordance with the standards and methods for waste disposal specified in Articles 12.2. through 12.5.

2. The standards and methods for the disposal of household waste, pursuant to Article 7. of the Law, shall be as follows:

1) Collection and Transportation

a. Household waste shall be collected and transported in a manner that separates incinerable waste (hereinafter referred as "combustible waste") from nonincinerable waste (hereinafter referred as "noncombustible waste"), or that separates the ashes of anthracite coal briquettes (yontan) from the ashes of nonyontan. However, Mayors/County Heads may specify the classification of refuse according to the conditions in their areas of jurisdiction.

b. Curb collection of waste is required in both residential and business areas. However, Mayors/County Heads may stipulate specific collection methods according to the conditions in their areas of jurisdiction, as stipulated by municipal regulation.

c. Waste shall not be blown away or leaked out.

d. Waste shall be collected at regular intervals. Mayors/County Heads shall set forth a seasonal and regional collection schedule of waste to manage waste generation, in compliance with local government regulation.

e. Vehicles used exlusively for transportation of waste must be equipped with a compactor and a mechanical intake.

f. Vehicles and handcarts used for transportation of waste shall be maintained cleanly.

2) Disposal

a. Sites where waste is separated and recycled or composted shall be maintained in a condition that prevents dust, noise, odor, and the breeding of rats, flies, mosquitos, or other vermin.

b. In principle, combustible waste shall be incinerated and noncombustible waste shall be landfilled.

c. Air pollutants generated from incineration facilities shall be emitted in compliance with the discharge emission standards specified in Article 14. of the Environment Preservation Law.

d. Landfill sites for waste shall be covered with soil or similar material (hereinafter referred to as "cover") approximately 15 cm thick or more on every day of landfill, and 30 cm thick or more cover shall be applied when landfill activities are temporarily suspended for more than one week. Completed landfill sites shall be given a cover of approximately 60 cm thick or more. However, when only noncombustible waste such as incinerator ashes or ashes of anthracite coal briquettes (Yontan) are landfilled, cover need not be applied until the completion of landfill activities.

e. When only biodegradable waste is landfilled, the thickness of each layer shall be 3 m or less.

3. The standards and methods for the disposal of human excreta, related to Article 7. of the Law, shall be as follows:

## 1) Collection and Transportation

a. Suction equipment shall be used to collect human excreta. However, manual collection equipment may also be used in those areas where suction equipment is difficult to access.

b. Suction equipment shall be equipped with gauges to measure the amount collected.

c. The collection and transportation of human excreta shall be carried out by using equipment exclusively made for that purpose and in a manner that does not allow human excreta to leak or emit odors.

- d. Vchicles used for transportation shall be maintained cleanly.
- 2) Treatment

a. Human excreta shall be treated in night soil treatment facilities, pursuant to the stipulation of the Environmental Preservation Law, or final sewage treatment plants (hereinafter referred to as "sewage treatment plants") pursuant to the stipulation of the Sewage Law. Where the treatment capacity of bo'h facilities is not enough, extended septic tank or alternate methods stipulated by the EA may be used.

b. After treatment, human excreta shall be discharged in compliance with the discharge permit standards stipulated in Article 30. of the Environment Preservation Law.

4. The standards and methods for the disposal of general industrial waste related to Article 7. of the Law shall be as follows:

1) Storage

a. General industrial waste, household waste, specific industrial waste, and recyclables or reusables shall all be stored separately.

b. General industrial waste shall be stored in a manner that prevents scattering, leaking, ground penetration, and odors.

c. Storage sites shall be free from breeding of rats, mosquitos, flies, or other vermin

2) Collection and Transportation

a. Vehicles, containers, and pipelines for transportation of general industrial waste shall be cleanly maintained to prevent waste from scattering, leaking, and emitting odors.

b. Liquid or liquid-state general industrial waste shall be collected and transported in the proper tanks, containers, or pipelines.

3) Treatment

a. Acidic and alkaline general industrial waste shall be neutralized to a pH between 5.0 and 9.0.

41

b. The weight of ashes after burning animal excreta or dead bodies shall be at least 15 percent less than its weight before burning.

c. Landfill shall be conducted after the water content in general industrial waste is reduced to 85 percent or less of its original water content. However, excluded are those cases where the transportation of general industrial waste is by water.

d. The standards and methods of refuse disposal prescribed in Article 12.2. shall be applied to the disposal of any general industrial waste not specified in paragraphs a. through c. above.

5. The standards and methods for the disposal of specific industrial waste, pursuant to Article 7. of the Law, shall be as follows:

1) Storage

a. Specific industrial waste, household waste, and general industrial waste, and recyclables or reusables shall all be stored separately.

b. Specific industrial waste shall be stored in a manner to prevent scattering, leakage, ground penetration, and odors.

c. Specific industrial wastes shall be stored according to types and disposed of in the order of their generation, to prevent such waste from causing secondary pollution from long-term storage.

d. Liquid or semiliquid specific containers or pipelines to avoid the potential danger of mixing leakage.

e. Storage sites for specific industrial wastes shall be maintained cleanly to prevent the breeding of rats, mosquitos, flies, or other vermin.

2) Collection and Transportation

a. Vehicles, containers, and pipelines for transportation of specific industrial waste shall be maintained to prevent scattering, leakage, and odors.

b. Liquid or liquid-state specific industrial waste shall be collected and transported in the proper containers, or pipelines to avoid the potential of mixing or leakage.

c. Specific industrial wastes shall be collected and transported by type.

d. Vehicles transporting specific industrial wastes (excluding waste synthetic resins) shall display temporary or permanent plates which read "Vehicle Transporting Special Industrial Waste" in red characters on a white background (50 cm x 20 cm or larger) on both the front and rear of the vehicles.

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3) Disposal

a. Special Hazardous Industrial Waste

(a) Special hazardous industrial waste shall be landfilled after treatment by the following methods:

- i) Polychlorinated biphenyls (PCBs) or pentachlorophenyl PCP) shall be treated by high temperature destruction.
- ii) Special hazardous industrial wastes other than PCBs and PCP shall be treated by high temperature destruction, oxidation, reduction, or fixation.
- (b) Extraction Potential (EP) test result standards are:
  - i) Cadmium or its compounds: Cadmium in extraction liquid must be less than 0.1 mg/L.
  - ii) Cyanide compounds: Cyanide in extraction liquid must be less than 1.0 mg/L.
  - iii) Organic phosphorus compounds: Organic phosphorus in extraction liquid must be less than 1.0 mg/L.
  - iv) Lead or its compounds: Lead in extraction liquid must be less than 1.0 mg/L.
  - v) Hexavalent chromium or its compounds: Hexavalent chromium in extraction liquid must be less than 0.5 mg/L.
  - vi) Arsenic or its compounds: Arsenic in extraction liquid must be less than 0.5 mg/L.
  - vii) Mercury or its compounds: Mercury in extraction liquid must be less than 0.005 mg/L.
  - viii) PCB or PCP: PCB or PCP in extraction liquid must be less than 0.003 mg/L.
  - ix) Copper or its compounds: Copper in extraction liquid must be less than 3 mg/L.

(c) When special industrial waste treated by high temperature decomposition, oxidation, reduction, or fixation specified in paragraph (a) does not meet the standards specified in paragraph (b), the waste shall be treated by cement solidification.

(d) When special toxic industrial waste treated by cement solidification specified in paragraph (c) does not meet the standard specified in paragraph (b), the waste shall be buried in a landfill facility for special toxic industrial waste.

b. Waste Oil: The ashes remaining after burning waste oil shall be landfilled. However, waste oil with high water contents shall be burned after separating water from oil. Oil contents in water after separation shall be less than 5 mg per L of water.

c. Waste Synthetic Resins: Waste synthetic resins shall be landfilled after melting or incineration.

d. Waste Acid and Alkali: Waste acid or alkali shall be neutralized to a pH between 5.0 and 9.0. The sediments produced from the process shall be landfilled after dewatering to a water content of 85 percent or less.

## Article 13. (Master Plan for Disposal of Waste)

1. The master plan for waste disposal established by the Mayor of the special city of Seoul, Mayors of cities under direct control of the National Government or Governors (hereinafter referred to "Mayors/Governors"), pursuant to Article 8.1. of the Law, shall include the following:

1) The overview of population, residential types, and geographical conditions in the areas of their jurisdiction

- 2) The status of waste generation and disposal
- 3) The details of planning year, planning areas, and planning population concerned
- 4) The amount, types, and component ratio of future generation of waste
- 5) The details of waste reduction
- 6) The details of storage, collection, transportation, and disposal of waste
- 7) The details of resource conservation (e.g., recycling and reuse)
- 8) The details of securing financial resources.

#### **CHAPTER 2. DOMESTIC WASTE**

## Article 14. (Exclusion from Specially Clean Areas, etc.)

1. The regions that Mayors/County Heads may exclude from specially clean areas pursuant to Article 9.1. of the Law among the special city of Seoul, cities under direct control of the National Government, cities and "eups" that are whole or part of "dong" or "ri," where population density is 300 or fewer persons per  $\text{km}^2$ .

2. The regions that County heads may designate as specially clean areas among "myun," pursuant to Article 9.2. of the Law, are as follows:

1) A whole or part of "ri," where population density is 300 or more persons per  $km^2$ 

2) The regions that are required to maintain cleanliness, c.g., sightseeing areas, such as National Parks. In this case County Heads are entitled to designate the regions concerned as specially clean areas for the limited period of time when there are many visitors.

#### Article 15. (Structure of Restrooms in Specially Clean Areas)

1. Restrooms constructed at land or buildings in specially clean areas shall contain flush toilets as prescribed in Article 9.3.1) of the Law. However, privies may be installed when Mayors/County Heads deem it necessary due to lack of water supply facilities and sewer systems.

2. The restrooms mentioned in Article 15.1. shall be maintained as follows:

1) Flush toilets

a. Toilets shall be equipped with U-type pipes ("traps") to prevent odors, and shall always remain filled with water.

b. Acid or alkali in insecticides strong enough to prevent digestion or oxidation in sewage treatment facilities or night soil treatment tanks shall not be applied in restrooms.

2) Privies

a. When not in use, the hole for the toilet bowl shall always be covered with a lid.

b. Privies shall be sanitized to prevent the generation and breeding of flies and their larvae.

3. The owner, occupant, or manager of land or buildings in specially clean areas, pursuant to Article 15.1., who constructs a restroom for public use, shall meet the stipulations of Articles 9.1.5) and 9.1.6), and Articles 9.2.2) and 9.2.3).

4. Anyone who installs a restroom, pursuant to Article 15.3., may charge a fee to the users according to municipal regulations for operating and maintaining restrooms sanitarily.

45

## Article 16. (Installation of Refuse Containers in Specially Clean Areas, etc.)

1. Pursuant to Article 9.3.1 of the law, refuse containers installed at land or buildings in specially clean areas, excluding containers for reusable refuse, shall be made as follows.

1) Refuse containers shall be manufactured from water-resistant materials such as metals or plastics.

2) Refuse containers shall have a capacity of 35 L or more, and shall be manufactured to facilitate their transportation.

3) Each waste container should be watertight and provided with a lid.

2. Separate refuse containers shall be installed to store reusable, noncombustible, and combustible refuse separately, and reusable refuse, yontan ashes, and nonyontan ashes separately. The following paragraphs specify the locations where refuse containers shall be installed. However, only two containers may be required, for reusable refuse and other refuse, where there is no system for separate collection or where yontan ashes or other noncombustible ashes are not generated.

1) Refuse containers for household use shall be installed or furnished in places of residence, and those for business use shall be installed or furnished in places of business.

2) Public refuse containers that facilitate separate collection shall be installed or furnished at every building or entrance in apartments, condominiums, or other public residential houses.

3. Refuse containers shall be maintained as follows:

1) The container shall remain covered with a properly fitting lid, except during disposal or emptying of refuse.

2) Refuse containers and their surroundings shall be regularly cleaned to prevent emissions of odors and breeding of rats, flies, mosquitos, and other vermin.

## Article 17. (Standards and Methods of Disposal of Large Quantities of Refuse)

The disposal of refuse by the generators of large quantities of refuse, pursuant to Article 10.2. of the Law and Article 3. of the Presidential Decree for Waste Management Law (hereinafter referred to as the "Decree"), shall follow the stipulations of Articles 12.1. and 12.2. However, Mayors/County Heads are entitled to dispose of refuse consigned from generators who have difficulty in disposing of their refuse by themselves (including collection, transportation, and disposal of refuse by contractors pursuant to Article 11.2.), according to the standards and methods stipulated in Articles 12.1. and 12.2.

Article 18. (Scope of Recycle/Reuse, etc.)

1. The recycle/reuse of domestic waste, pursuant to Article 10.4. of the law, refers to the following cases:

- 1) Resources re-collected from refuse
- 2) Excreta (including livestock excreta) used as fertilizer

3) Other cases that the EA authorizes.

2. Anyone who intends to dispose of domestic waste for the purpose of recycle/reuse shall report to Mayors/County Heads in the areas where the domestic waste of concern is generated. The report shall be made one day before the opening of recycle/reuse activities by filling out the "Report on Recycle/Reuse of Domestic Waste" (Form No. 1). However, excluded are those cases in which the estimated amount of recycle/reuse is less than 100 kg per day, or those cases when anyone with a permit of night soil treatment or refuse disposal services, pursuant to Article 11.2. of the Law, recycles or reuses waste produced in the process of disposal of the waste, or when anyone with a secondhand dealer permit, pursuant to the "Secondhand Goods Business Law," disposes of waste.

3. Mayors/County Heads who have received the report stipulated in Article 18.2. shall issue the "Certificate of Report on Recycle/Reuse of Domestic Waste" (Form No. 2).

## Article 19. (Permit of Domestic Waste Disposal Business)

1. The permit requirements outlining the types of domestic waste disposal business such as facility, equipment, technical ability, etc., pursuant to Article 11.1. of the Law, are given in Table 2 in the Annex to this Order.

2. Anyone who intends to obtain a permit of domestic waste disposal business, pursuant to Article 11.1. of the Law, shall submit an "Application for Permit of Domestic Waste Disposal Business" (Form No. 3), to the following Mayors/County Heads concerned:

1) For the business of collection and transportation of human excreta and refuse, Mayors/County Heads who control the corresponding collection areas

2) For the business of night soil treatment and refuse disposal, Mayors/County Heads who control the areas where the corresponding facilities are constructed

3) For the business of night soil treatment tank cleaning, Mayors/County heads who control the area where the main business offices are located.

3. When Mayors/County Heads issue a permit for a business of domestic waste disposal, as stipulated in Article 11.1. of the law, they shall issue a "Certificate of Permit of a Business of Domestic Waste Disposal" (Form No. 4).

Article 20. (Issuing Permits for Modification of Permitted Items of Domestic Waste Disposal Business)

1. Items which require a permit for modification of permitted items of domestic waste disposal business, pursuant to the latter part of Article 11.1. of the Law, are as follows:

1) Change of a representative

2) New construction of night soil treatment or refuse disposal facilities (only for those cases where the new facilities will be constructed in the areas of jurisdiction of the Mayors/County Heads who granted a permit of business of domestic waste disposal), or change of disposal capacity

3) Change of treatment method for night soil.

2. Anyone who intends to obtain a modification of permit, pursuant to Article 20.1., shall submit an "Application for Permit Modification of Domestic Waste Disposal Business" (Form No. 3), with the permit to the Mayors/County Heads concerned.

#### Article 21. (Standards for Cleaning of Treatment Tanks)

1. The standards for cleaning of sewage treatment facilities, night soil treatment tanks and livestock wastewater treatment facilities, pursuant to Article 11.2.5 of the Law, shall be as follows:

1) Sedimented sludge, scum, residue, etc., shall be removed, and the sealed parts, pipe lines, and other parts shall be kept clean so as not to become clogged.

2) Strong acids or insecticides that interfere with the cleaning function of sewage treatment facilities, night soil treatment tanks, and livestock wastewater treatment facilities shall not be applied.

#### Article 22. (Standards for Construction of Night Soil Treatment Facilities)

1. The standards for construction of night soil treatment facilities pursuant to Article 14.1. of the Law, shall be as follows:

1) Night soil treatment facilities shall be principally constructed on a sewage treatment plant site or in the area adjacent to the facility, pursuant to the Sewer System Law.

2) Parallel processing units shall be provided to respond to emergency conditions.

3) Each treatment facility shall be furnished with a laboratory to do experiments necessary for operating and maintaining the facility.

4) Each facility shall be maintained in a clean condition to prevent breeding of vermin such as flies and to prevent odor emission.

#### Article 23. (Standards for Construction of Refuse Disposal Facilities)

1. The standards for construction of refuse disposal facilities pursuant to Article 14.1. of the Law, shall be as follows:

1) Each facility shall fully endure its own weight, live load, and other loads, and fully resist heat, humidity, impact, and other effects generated from the treatment process.

2) Each facility shall be furnished with the necessary equipment to prevent the scattering of refuse and dust, and to prevent odor emission.

3) Disposal facilities shall be structured to minimize noise and vibration that interferes with the living environment around the facility.

4) Disposal facilities shall be constructed to prevent contaminated water generated in the process of storage and disposal from flowing out, or penetrating into the ground.

5) Each disposal facility shall be furnished with a leachate treatment facility to prevent soil or ground water contamination by penetration of contaminated water generated from landfill sites. Also furnished shall be equipment for spreading refuse, compacting soil covering, washing transportation vehicles, and weighing transported refuse. When only noncombustible refuse is landfilled, the equipment for soil covering need not be present all the time.

6) Incincration facilities shall be furnished with equipment to prevent air and water pollution and shall be constructed to recover heat generated from incineration as much as possible.

## Article 24. (Approval of Construction of Night Soil Treatment Facilities)

1. Anyone who intends to obtain an approval of construction of a night soil treatment facility, pursuant to Article 14.2. of the Law, shall submit an "Application for Approval of Construction of Night Soil Treatment Facility" (Form No. 5), with an attachment, "Feasibility Study for Construction of Night Soil Treatment Facility," to the EA. The EA shall determine and announce the items to be included in the feasibility study for construction of a night soil treatment facility.

2. The EA shall examine the feasibility study for construction of a night soil treatment facility submitted pursuant to the Article 24.1. and then notify the applicant whether or not construction of a night soil treatment facility is appropriate.

3. Anyone who has been notified that construction of a night soil treatment facility is appropriate, pursuant to Article 24.2., shall submit a business plan to the EA and obtain approval for the following items:

- 1) An outline of the facility
- 2) Estimated annual operation and maintenance costs
- 3) Capacity and method of disposal of night soil
- 4) Water quality of discharged water and discharging method
- 5) Amount of sludge production and disposal methods.

4. Items which require an approval of modification of a night soil treatment facility, pursuant to the latter part of Article 14.2. of the Law, are as follows:

1) Capacity of night soil treatment facility

- 2) Disposal methods
- 3) Discharge methods of wastewater
- 4) Disposal method of final sludge.

5. Anyone who intends to obtain an approval of modification, pursuant to Article 24.4., shall submit an "Application for Approval of Modification of Night Soil Treatment Facility" (Form No. 5), to the EA.

## Article 25. (Approval of Construction of Refuse Disposal Facility, etc.)

1. Anyone who intends to obtain an approval of construction of a refuse disposal facility pursuant to Article 14.2. of the Law, shall submit an "Application for Approval of Construction of Refuse Disposal Facility" (Form No. 5), with an attachment, "Feasibility Study for Construction of Refuse Disposal Facility," to the EA or (for an approval of construction of refuse landfill facility with a landfill area less than 50,000 m<sup>2</sup>), to Mayors/Governors. This condition applies hereafter. The EA shall determine and announce the items to be included in the feasibility study for construction of a refuse disposal facility.

2. The EA or Mayors/Governors shall examine the feasibility study for construction of refuse disposal facility submitted, pursuant to Article 25.1., and then notify the applicant whether or not construction of a night soil treatment facility is appropriate.

3. Anyone who has been notified that the construction of a refuse disposal facility is appropriate, pursuant to Article 25.2., shall submit a business plan to the EA or Mayors/Governors and shall obtain an approval for the following items:

- 1) Disposal facility of refuse
  - a. An outline of the facility
  - b. Estimated annual operation and maintenance costs
  - c. Landfill capacity
  - d. Plan for securing landfill sites and the drawing, location, and area of landfill sites
  - e. Disposal plan of leachate.
- 2) Incineration facility, recovery facility, or compost facility
  - a. The items corresponding to Article 25.3.1) a. and b.
  - b. The estimated quantity and disposal method of residues generated from the process.

4. Items which require an approval of modification of refuse disposal facility, pursuant to the latter part of Article 14.2. of the Law, are as follows:

1) For a landfill facility, the area of the landfill site and the treatment method of leachate

2) For incineration, recovery, or compost facility, the type of facility, the location of facility, the disposal capacity, and the disposal method of residues.

5. Anyone who intends to obtain an approval of modification pursuant to Article 25.4. shall submit an "Application for Approval of Modification of Refuse Disposal Facility" (Form No. 5), to the EA or Mayors/Governors.

#### Article 26. (Operation and Maintenance Standards for Night Soil Treatment Facility)

1. The operation and maintenance standards for night soil treatment facilities, pursuant to Article 14.3. of the Law, are as follows:

1) Performance of the facilities shall be inspected regularly to ensure normal safe, sanitary operating conditions.

2) Effluent from a night soil treatment facility shall be discharged in accordance with the effluent quality standards, pursuant to Article 39. of Environment Preservation Law.

3) The amount and type of input human excreta shall be regularly measured and the conditions of each treatment process shall be monitored.

4) When the facility is out of order, it shall be repaired quickly.

2. The builder or manager of a night soil treatment facility shall measure the quality of effluent once or more per week in the special city of Seoul, cities under direct control of the National Government and cities, or once or more per month in other areas, to see if the effluent meets the standards of Article 26.1.2). Records of effluent quality shall be kept for 5 years.

#### Article 27. (Standards for Operation and Maintenance of a Refuse Disposal Facility)

1. The operation and maintenance standards for a refuse disposal facility, pursuant to Article 14.3. of the Law, are as follows:

1) Landfill Facility

a. The performance of the leachate treatment facility shall be inspected regularly to ensure safe, sanitary, normal operating conditions.

b. Leachate shall be treated to a Biological Oxygen Demand (BOD) of less than 150 ppm and then discharged. However, when the EA declares that the quantity and concentration of effluent, and the conditions of effluent location do not damage the environmental quality, the BOD limit does not apply.

c. When the facility is out of order, it shall be repaired quickly.

d. Gases generated from finished landfill sites shall be collected and incinerated or vented.

2) Incineration Facility

a. The performance of the facility shall be inspected regularly to ensure safe, sanitary, operating conditions.

b. The quantity of refuse input to the facility shall not exceed the disposal capacity of the incineration facility.

c. The refuse shall be uniformly mixed in the facility.

d. For a batch incineration facility, the outlet temperature of the main combustion chamber shall be more than 400  $^{\circ}$ C.

e. For a continuous incineration facility, the outlet temperature of the main combustion chamber shall be more than 700  $^{\circ}$ C and less than 1200  $^{\circ}$ C.

f. The ashes from an incineration facility shall not be blown away.

g. When the facility is out of order, it shall be repaired quickly.

3) Recovery facility or compost facility

a. The performance of the facility shall be inspected regularly to ensure safe, sanitary, operating conditions.

b. Scattering of refuse and dust or the emission of odor shall be prevented.

c. For compost facilities, the inner temperature of the reactor and the amount of air that enters shall be maintained for proper composting.

d. When the facility is out of order, it shall be repaired quickly.

2. The builder or manager of a refuse disposal facility shall check once or more per month whether the effluent from a landfill facility meets the standards of Article 26.1.1)b., and whether the emission from an incineration facility meets the standards of Article 14. of the Environment Preservation Law. These records shall be kept for 5 years.

#### Article 28. (Report of Construction of Sewage Treatment Plant, etc.)

Anyone who constructs a sewage treatment facility, night soil treatment tank, or livestock wastewater treatment facility, pursuant to Article 15.4. of the Law, shall submit a report for construction (Form No. 6), with an attached blueprint (excluding cases when night soil treatment tanks are supplied by an approved manufacturer pursuant to Article 18.1. of the Law), to the Mayors/Governors concerned, pursuant to Article 15.4. of the Law. The design of a livestock wastewater treatment facility shall include a custom design drawing of the standard design specification prescribed by the EA.

## Article 29. (Inspection of Completion of Construction)

1. Anyone who intends to have an inspection of a completed sewage treatment facility, night soil treatment facility, or livestock wastewater treatment facility, pursuant to Article 15.5. of the Law, shall submit two copies of the "Application for Inspection of Completion of Construction" (Form No. 7), to the Mayors/County Heads concerned.

2. When the Mayors/County Heads finish an inspection of completion of construction, they shall certify it on the submitted application form and then return it to the applicant. They shall also prepare a management card (Form No. 8), and keep it.

## Article 30. (Standards for Construction of Sewage Treatment Facilities, etc.)

1. The standards for construction of sewage treatment facilities, night soil treatment tanks, or livestock wastewater treatment facilities, pursuant to Article 15.7. of the Law, are as follows:

1) The size of a sewage treatment facility or night soil treatment tank shall be larger than required, based on the estimated number of users. The size of a livestock wastewater treatment facility shall be specified separately by the EA for the number of cattle concerned. The number of users shall be estimated, based on the standard for the night soil treatment tank, according to the use of buildings (KSF 1507) in the Korean Industrial Standards, specified by the Industry Promotion Administration.

2) Ceilings, floors, and walls of a sewage treatment facility, night soil treatment tank, or livestock wastewater treatment facility shall be constructed of water-resistant materials or treated with waterproofing materials to prevent leakage.

3) A sewage treatment facility, night soil treatment tank, or livestock wastewater treatment facility shall be constructed to resist soil pressure, water pressure, its own weight, and other loads.

4) The upper part of a sewage treatment facility or night soil treatment tank shall be covered with a lid with a diameter of 60 cm or greater. The lid shall be made of water-resistant material. Excluded are those cases where the upper part of the facilities is also a lid.

5) Any part of a sewage treatment facility likely to corrode or deform shall be made of noncorrosive or nondeformable materials.

6) Each facility shall be vented to discharge generated gas. Vents shall be built to prevent inflow of extraneous matter and equipped with insect screens.

7) The treatment facility shall be built to accommodate a variation in influent quantity, or shall be equipped with a device to keep the influent quantity uniform.

8) Any treatment facility parts likely to emit odors shall be sealed or equipped with a device to prevent odor emission.

9) Any mechanical parts shall t -turable enough to operate continuously, and shall be built to prevent vibration and noise.

10) The facility shall be structured for easy and safe access for checks, repairs and sludge cleaning.

#### Article 31. (Standards for Operation and Maintenance of Sewage Treatment Facilities)

The operation and maintenance standards of a sewage treatment facility, night soil treatment tank, or livestock wastewater treatment facility, pursuant to Article 16.1. of the Law, are as follows:

1) The disposal facility shall be inspected regularly to ensure normal operating conditions, and shall be cleaned inside once per year or more. For sewage treatment facilities or night soil treatment tanks with a treatment capacity of 250 kl or more, or livestock wastewater treatment facilities with a capacity of 5 kl or more, effluent quality shall be tested once per year or more.

2) The effluent from sewage treatment facilities, night soil treatment tanks or livestock wastewater treatment facilities shall meet the following standards:

a. For sewage treatment facilities, the BOD of effluent shall be 100 ppm or less when treatment capacity is less than 100 kl, 80 ppm or less when treatment capacity is more than 100 kl and less than 200 kl, and 60 ppm or less when treatment capacity is more than 200 kl.

b. For night soil treatment tanks, the BOD removal efficiency shall be 50 percent or greater.

c. For livestock wastewater treatment facilities, the BOD of effluent shall be 2500 ppm or less for livestock facilities that discharge less than 3 kl per day of animal excreta, or 2000 ppm or less for livestock facilities that discharge 3kl or more per day.

3) The effluent from sewage treatment facilities or night soil treatment tanks with 500 or more users shall be sterilized by chlorine or other disinfectants.

4) The emission of odor and the generation and breeding of flies, mosquitos, or other vermin shall be prevented.

5) When the facility is out of order, it shall be repaired quickly.

#### Article 32. (Check Lists, etc.)

Check lists for night soil treatment facilities, refuse disposal facilities, sewage treatment facilities, night soil treatment tanks, and livestock wastewater treatment facilities, pursuant to Articles 26.1.1), 27.1.1)a., 27.1.2)a., 27.1.3)a. and 31.1) are given in Table 3 in the Annex to this Order.

## Article 33. (Approval of Design and Construction of a Domestic Waste Disposal Facility)

Anyone who is not a designer and constructor of domestic waste disposal facilities who intends to design and construct night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, pursuant to the exclusion of Article 17.1. of the Law, shall submit an "Application for Approval of Design

and Construction" (Form 9, Annex 3), with the following attachments to the head of the regional environmental agency concerned:

- 1) Refuse landfill facilities
  - a. An explanation of an outline of the facility
  - b. Accounts of expenses for construction
  - c. Execution design
  - d. Documents to specify the location, area, and capacity of landfill sites
  - c. Documents verifying ability of design and construction.

2) Incineration, recovery, and composting facilities of refuse, night soil treatment facilities, and sewage treatment facilities

a. Documents corresponding to numbers 1) a. through 1) c. of Article 33.

b. Documents to specify the location, capacity and disposal processes of the facilities

c. Estimated amount of residues resulting from facility processes and an explanation of their disposal methods

d. Documents verifying ability of design and construction.

#### Article 34. (Cases in Which Domestic Waste Disposal Facilities Can Be Designed and Constructed)

1. The cases stipulated by the MOHSA Order, pursuant to Article 17.1.3) of the Law, shall be as follows:

1) For research

2) Facilities which the EA recognizes as rare facilities.

#### Article 35. (Qualifications of Construction Monitor)

Eligibility for appointment by the EA as a construction monitor, pursuant to Article 17.2. of the Law, shall be restricted to those who registered a business of design and construction of corresponding facilities, pursuant to Article 17.3. of the Law.

#### Article 36. (Registration of Design and Construction of Domestic Waste Disposal Facilities)

1. The requirements for registration of a business to design and construct night soil treatment facilities, refuse disposal facilities, sewage treatment facilities, night soil treatment tanks, or livestock

wastewater treatment facilities, pursuant to Articles 17.3. and 17.4. of the Law, are defined in Table 4 in the Annex to this Order.

2. Anyone who intends to register a business to design and construct night soil treatment facilities, refuse disposal facilities, sewage treatment facilities, night soil treatment tanks, or livestock wastewater treatment facilities, pursuant to Articles 17.3. and 17.4. of the Law, shall submit an "Application for Registration of Business for Design and Construction of Domestic Waste Disposal Facilities" (Form No. 10), to the appropriate head of the regional environment agency, or to appropriate Mayors/Governors, for night soil treatment tanks or livestock wastewater treatment facilities.

3. The head of the regional environment agency or Mayors/Governors shall issue a certificate of registration (Form No. 11) to the person who has registered a business to design and construct domestic waste disposal facilities, pursuant to Article 36.2.

# Article 37. (Registration to Modify Registered Items of a Business to Design and Construct Domestic Waste Disposal Facilities)

1. Items which require a registration to modify a business to design and construct domestic waste disposal facilities, pursuant to the Articles 17.3. and 17.4. of the Law, are as follows:

- 1) A change of representative
- 2) A change of location of main office or laboratory
- 3) A change of technical abilities
- 4) A change of licensed items pursuant to the Construction Business Law.

2. Anyone who intends to change the registered items of a business to design and construct night soil treatment facilities, refuse disposal facilities, sewage treatment facilities, night soil treatment tanks, or livestock wastewater treatment facilities, pursuant to Article 37.1., shall submit an "Application to Modify Registration of Design and Construction of Domestic Waste Disposal Facilities" (Form No. 10), to the appropriate head of the regional environment agency for night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, or to the appropriate Mayors/Governors for night soil treatment tanks or livestock wastewater treatment facilities.

### Article 38. (Requirements for Registration of a Night Soil Treatment Tank Manufacturing Business)

1. The requirements for registration of a night soil treatment tank manufacturing business, pursuant to Article 18.1. of the Law, are given in Table 5 in the Annex to this Order.

2. Anyone who intends to conduct a night soil treatment tank manufacturing business, pursuant to Article 18.1. of the Law, shall submit an "Application of Registration of a Night Soil Treatment Tank Manufacturing Business" (Form No. 12), to the EA.

3. The EA shall issue a certificate of registration (Form No. 13), to the person registering the night soil treatment tank manufacturing business.

## Article 39. (Registration to Modify Registered Items of a Business of Night Soil Treatment Tank Manufacturing)

1. Items which require a registration to modify a business of night soil treatment tank manufacturing, pursuant to the exclusion in Article 18.1. of the Law, are as follows:

- 1) A change of representative
- 2) A change of location of main office or laboratory
- 3) A change of technical abilities
- 4) A change of manufacturing facilities.

2. Anyone intending to change the registered items of a business of night soil treatment tank manufacturing, pursuant to Article 39.1., shall submit an "Application to Modify Registration of a Business of Night Soil Treatment Tank Manufacturing" (Form No. 12), to the EA.

## Article 40. (Specifications and Performance of Night Soil Treatment Tanks)

The standards for specifications and performance of night soil treatment tanks, pursuant to Article 18.3. of the Law, are given in Table 6 in the Annex to this Order.

#### Article 41. (Appointment of a Construction Monitor)

Eligibility for appointment as a construction monitor by the EA, pursuant to Article 20.1. of the Law, shall be limited to registered designers and constructors, pursuant to Article 17.3. and 17.4. of the Law. In the case of a business whose registration has been cancelled, or a business whose operation has been suspended, eligibility may be extended to those whose business is the same as the cancelled or suspended operation, pursuant to Article 19 of the Law. Therefore, if the business registration of a designer and constructor of night soil treatment tanks is cancelled, or if said business operation is suspended, a designer and builder of night soil treatment tanks may be appointed as a construction monitor.

## **CHAPTER 3. INDUSTRIAL WASTE**

#### Article 42. (Report by Businessmen)

1. Businessmen who generate industrial waste (hereinafter referred to "businessmen") and are required to report to Mayors/Governors, pursuant to Article 21.2. of the Law, are the following:

1) Any businessman whose estimated generation of special hazardous industrial waste is 1000 kg or more per year

2) Any businessman whose estimated generation of waste oil that is special industrial waste is 2000 kg or more per year

3) Any businessman whose estimated generation of waste synthetic resins that is special industrial waste is 5000 kg or more per year

4) Any businessman whose estimated generation of waste acid or waste alkali that is special industrial waste is 5000 kg or more per year

5) Any businessman that does not fall under the above categories of Articles 42.1.1) through 42.1.4, whose estimated generation of special industrial waste is 5000 kg or more per year

6) Any businessman who generates general industrial waste stipulated in Table 1, Number 2, in the Annex to this Order.

2. Any businessman who falls under one of the above categories of Article 42.1. shall submit a "Report on Industrial Waste Generation" (Form No. 14) to the appropriate Mayors/Governors of the areas in which the industrial wastes are generated.

#### Article 43. (Recordkeeping of Industrial Wastes)

Each businessman shall record the amount of production, recycling or reuse, and disposal of industrial waste on Form No. 15, pursuant to Article 21.3. of the Law. These records shall be kept for 5 years.

#### Article 44. (Standards for Disposal of Industrial Waste by a Third Party)

Any businessman who intends to entrust the disposal of his industrial waste to a trustee, according to Article 23.1. of the Law, shall:

- 1) Give priority to the person who recovers or reuses the industrial waste
- 2) Confirm the trustee's disposal ability in advance.

## Article 45. (Categories and Reporting of Recycling and Reuse of Industrial Waste)

1. The recycling and reuse of industrial waste, according to Article 23.2. of the Law, shall refer to the recovery and reuse of available resources from industrial waste. The EA shall specify and announce the extent of the recycling and reuse.

2. Anyone who intends to dispose of another's industrial waste for the purpose of recycling and reuse (hereinafter referred to as a "recycler and reuser of industrial waste"), pursuant to Article 23.2. of the Law, shall submit a "Filing To Recycle and Reuse Industrial Waste" (Form No. 16), to the Mayors/Governors of the areas in which the industrial wastes are generated, 15 days before the opening of recycling and reuse activities. Excluded are those cases where the estimated amount of recycling and reuse of industrial waste is less than 50 kg per day, or the estimated amount of waste synthetic resins is less than 15 kg per day.

3. The Mayors/Governors who have received an application, pursuant to Article 45.2., shall issue a certificate of recycling and reuse of industrial waste (Form No. 17) to the filer.

4. The recycler or reuser of industrial waste, pursuant to Article 45.2., shall submit a "Modification of Recycle or Reuse of Industrial Waste" (Form No. 17), to the Mayors/Governors when the following items are changed:

- 1) Types of waste which are disposed
- 2) Purpose or method of recycling or reuse.

### Article 46. (Construction and Operation of Public Disposal Facilities)

By Article 23.3. of the Law, industrial waste disposal facilities for wide range disposal of industrial waste (hereinafter referred to as "Public waste disposal facilities") may be constructed and operated by:

1) The Environmental Contamination Protection Agency

2) The Korean Resources Recycling Corporation.

### Article 47. (Consignment Fee for Public Waste Dispo Facilities)

1. The EA shall specify the consignment fee and other necessary matters for consignment disposal by public waste disposal facilities, pursuant to Article 23.4. of the Law, according to the following items:

1) Expense of construction and operation of the public waste disposal facility for disposal of particular types of industrial waste

2) Expense of collection and transportation of the industrial wastes by the constructor and operator of public waste disposal facilities.

## Article 48. (Permit for Industrial Waste Disposal Business)

1. Permit requirements for for industrial waste disposal business such as facilities, equipment, and technical ability, pursuant to Article 24.1. of the Law, are given in Table 7 in the Annex to this Order.

2. Anyone who intends to obtain a permit for an industrial waste disposal business, pursuant to Article 24.1. of the Law, shall submit a "Business Plan of Industrial Waste Disposal Business" (Form No. 18) to the head of the regional environmental agencies in charge of the areas where the main facilities will be constructed.

3. The head of the regional environmental office shall check the business plan for an industrial waste disposal business, pursuant to Article 48.2., and notify the applicant whether or not the business plan is appropriate.

4. Anyone who has received a notification of approval for a business plan, pursuant to Article 48.3., shall submit an application for "Industrial Waste Disposal Business" (Form No. 19), with a description of facilities, equipment, and technical abilities, to the head of the regional environmental agency within 6 months from the date the notification of approval was received. However, the Environment Administration may extend the period of application up to 1 year when justifiable.

5. The head of the regional environmental agency who grants a permit, pursuant to Article 48.5., shall issue a "Certificate of Permit" (Form No. 20).

6. Anyone who has obtained a permit for an industrial waste disposal business, according to Article 48.5., shall comply with the following:

1) The certificate of permit shall be displayed at the office or business.

2) Technical personnel shall work in their areas of expertise.

3) No wastes other than those permitted shall be handled.

4) Disposal capacity of the corresponding facilities shall be considered before taking consignment of wastes.

5) No consignment of waste shall be rejected without justifiable reason, and all wastes shall be disposed of within 90 days from the day of consignment.

6) No wastes shall be reconsigned to a third party without justifiable reason.

7) If the business' name or technical abilities change, a "Report on the Modification of Industrial Waste Disposal Business" (Form No. 21), shall be submitted to the head of the regional environmental agency concerned, including documents to verify the modification and (for a change of business name) a certificate of permit, within 10 days of the modification.

8) If a businessman of industrial waste landfill has made or cancelled a contract for use of landfill facilities, together with a handler of general industrial waste disposal or a handler of special industrial waste disposal, the two parties concerned shall report the cancellation to the head of the regional environmental agencies concerned within 10 days.

## Article 49. (Permit of Modification of an Industrial Waste Disposal Business)

1. Items which require a permit for modification, pursuant to the latter part of Article 24.1. of the Law, shall be as follows:

1) A change of representative

- 2) A change of disposal wastes concerned
- 3) A change of location of disposal facility
- 4) An expansion or new construction of incineration or destruction facility
- 5) An expansion or new construction of a landfill facility.

2. Anyone who intends to obtain a permit of modification, pursuant to the latter part of Article 24.1. of the Law, shall submit to the head of the regional environmental agency an "Application for Modification of Industrial Waste Disposal Business" (Form No. 19), along with a certificate of permit. The stipulations of Articles 48.2, through 48.4, shall be applied to the permit of modification pertaining to Numbers 2) through 5) of Article 49.1.

#### Article 50. (Reissue of Certificate of an Industrial Waste Disposal Business)

Anyone who has obtained a permit of industrial waste disposal business (hereinafter referred to as "handler of industrial waste disposal") intends to obtain a reissue of a lost or worn out certificate, shall submit an application for "Reissue of Certificate of Permit of Industrial Waste Disposal" (Form No. 22) to the head of the regional environmental agency. The handler who finds the lost certificate after obtaining a new certificate, shall return the old certificate immediately to the head of the regional environmental agency.

#### Article 51. (Report on Disposal of Industrial Waste)

1. The businessman, handler of industrial waste disposal, or others who dispose of industrial waste, pursuant to Article 25. of the Law, shall report the following to the Mayors/Governors concerned:

1) Report on transportation

2) Report on landfill (only for special industrial waste by using the "Report on Transportation" [Form No. 23]).

2. For transportation of special industrial waste, the report pursuant to Article 51.1.1, on transportation, shall be submitted 1 day before the waste is transported. For transportation of general industrial waste, the records of transportation from the previous month and the transportation plan for next month shall be reported by the end of each month.

3. The report on landfill, pursuant to Article 51.1.2), shall be made with "A Report on Landfill of Special Industrial Waste" (Form No. 24 in the Annex to this order), by 1 day before the landfill.

4. The Mayors/Governors are entitled to have a businessman, handler, or any other who disposes of industrial waste submit a test result for industrial waste when they decide to examine the composition of special hazardous industrial waste.

## Article 52. (Standards for Construction of Industrial Waste Disposal Facilities)

1. The standards for construction of industrial waste disposal facilities, pursuant to Article 26.1. of the Law, shall be as follows:

1) A facility shall fully endure its own weight, live load, and other loads, and fully resist heat, humidity, emission gas, discharged water, impact, and enemicals used for disposal of industrial waste.

2) Facilities shall be furnished with the necessary equipment to keep industrial waste from scattering and to minimize odor.

3) Facilities shall be structured to prevent air and water pollution from storage and disposal of industrial waste.

4) Floors of the facilities shall be constructed of impermeable materials such as cement or asphalt.

5) The foundation of a landfill facility shall be prepared to prevent settling and soil or ground water contamination by penetration of leachate generated from the landfill site.

6) An incineration facility shall be constructed to recover heat generated from incineration if possible.

## Article 53. (Approval of Construction of Industrial Waste Disposal Facilities)

Anyone who intends to construct an industrial waste disposal facility, pursuant to Article 26.2. of the Law, shall submit an "Approval of Construction of Industrial Waste Disposal Facility" (Form No. 25), to the EA for public waste disposal facilities, pursuant to Article 23.3. of the Law, and to the regional environmental agency for other facilities.

## Article 54. (Approval of Modification of Industrial Waste Disposal Facilities)

1. Important items which require an approval of modification, pursuant to the latter part of Article 26.2. of the Law, shall be as follows:

1) Type of disposal waste

- 2) Expansion of incineration or destruction facility
- 3) Expansion of landfill facility.

2. The stipulations of Article 53. shall be applied to the procedure for an approval of modification of important items prescribed in Article 54.1.

## Article 55. (Standards for Operation and Maintenance of Industrial Waste Disposal Facilities)

1. The maintenance standards for industrial waste disposal facilities, pursuant to Article 26.3. of the Law, are as follows:

1) Common items

a. Anyone who has obtained an approval of construction of landfill facilities, incineration facilities, destruction facilities, oil and water separation facilities, or cement solidification facilities, pursuant to Article 26.2. of the Law, who begins to use these facilities, shall submit an "Application for Operation of Industrial Waste Disposal Facility" (Form No. 26), an "Application for Operation of Industrial Waste Landfill Facility" (Form No. 27) for landfill facilities to the EA or to the regional environmental agency concerned 10 days before the operation.

b. The handler of industrial waste disposal begins to use the landfill facilities, shall submit an "Application for Operation of Industrial Waste Landfill Facility" (Form No. 27) to the EA or to the regional environmental agency concerned 10 days before the operation.

c. The amount of industrial waste input into the facility shall be less than the facility's capacity.

d. In case of accidents such as industrial waste spill, the handler shall stop the operation of the facility immediately and take necessary measures to preserve the environment, including collection of the spilled waste.

e. The handler shall set forth and enforce safety rules and furnish fire extinguishers and other necessary fire safety equipment.

f. The handler shall conduct regular checks and repairs to maintain the normal functioning of the facility.

g. Handlers shall ensure that incineration facilities, destruction facilities, and oil and water separation facilities are tested for performance every 5 years by the agencies specified by the EA.

h. Facilities shall treat leachate from industrial waste disposal in compliance with the standards in Article 14. of the Environment Preservation Law, and carry out self-monitoring as stipulated in Article 22. of the Environment Preservation Law.

i. Handlers shall record the details of checks, inspections, and other measures taken, and keep them for 3 years.

j. In case a facility is out of order, they shall repair it quickly.

2) Incineration Facility

a. The temperature of offgas shall be kept at 700 °C or higher.

b. If a pit-crane method is used to feed industrial wastes, wastes shall be well mixed beforehand.

c. Handlers shall control the amount of air in combustion chambers and combustion control devices to accomplish complete combustion.

3) High temperature destruction facility

- a. The exit temperature of a high temperature furnace shall be kept at 1000 °C or higher.
- b. Handlers shall remove pitch, ashes, and other residue from the high temperature furnace.
- 4) Cement solidification facility
  - a. Cement solidification facilities shall use water-hardening type cement.
  - b. The amount of cement mixed shall be 150 kg or more per  $m^3$  of concrete.

c. The compressive strength of each axis of cured cement solidification shall be  $10 \text{ kg/cm}^2$  or more.

d. The shape and size of cured cement solidification shall be as follows:

- a) The ratio of volume to area of one surface shall be 1.0 or more.
- b) The ratio of the longest to the shortest side shall be 2.0 or less.
- c) The length of the shortest side shall be 5 cm or more.
- 5) Landfill facility

Landfill facilities shall be designed to collect gas emitted from the completed landfill site, and then to incinerate or discharge it.

## **CHAPTER 4. GUIDANCE AND SUPERVISION OF BUSINESSMEN**

## Article 56. (Checklists for the Technical Maintenance Consignment Contractor)

Pursuant to Article 11.2.1) of the Decree, the checklists for night soil treatment facilities, refuse disposal facilities, sewage treatment facilities, and night soil treatment tanks shall be given in Table 3 in the Annex to this Order, and those for industrial waste disposal facilities shall be given in Table 8 in the Annex to this Order.

## Article 57. (Training of Personnel in Charge of Waste Disposal)

1. Training of the technical personnel who are in charge of waste disposal, pursuant to Article 28. of the Law and Article 12. of the Decree, shall be conducted once or more every 3 years within a 2-week period (a 3-week period for technical personnel in charge of special hazardous waste disposal) in the National Environmental Research Institute or any institute accredited by the EA.

2. Subject, contents, and other necessary matters contained in training programs and courses shall be stipulated by the Environment Administration.

#### Article 58. (Recording Details of Waste Disposal)

1. The bookkeeper for waste management, pursuant to Article 29. of the Law, shall prepare a logbook on waste disposal according to the following conditions, and keep it for 5 years.

1) A recycler or reuser of domestic waste, pursuant to Article 10.4. of the Law, and a handler of domestic waste disposal, pursuant to Article 11. of the Law, shall maintain a "Logbook on Domestic Waste Management" (Form No. 28).

2) A recycler or reuser of industrial waste, pursuant to Article 23.2. of the Law, shall maintain a "Logbook on Industrial Waste Management" (Form No. 29).

3) Anyone who constructs and operates a public disposal facility, pursuant to Article 23.3. of the Law, and any handler of industrial waste disposal, pursuant to Article 24. of the Law, shall maintain a "Logbook on Domestic Waste Management" (Form No. 30).

#### Article 59 (Report on the Suspension, Reopening, or Termination of Business)

Anyone who intends to report the suspension, reopening, or termination of business, pursuant to Article 30. of the Law, shall submit an "Application for Suspension, Reopening, or Termination of Business," attaching the permit or registration certificate, to the corresponding agency from which the certificate was obtained, within 10 days of the suspension, reopening, or termination of business. A handler, designer, or builder of domestic waste disposal facilities shall use Form No. 31, and a handler of industrial waste disposal shall use Form No. 23.

#### Article 60. (Summary Report of Waste Disposal)

Pursuant to Article 31.1. of the Law, businessmen shall report the generation, disposal, and recycling or reuse of waste every year according to the following categories:

1) These who recycle or reuse domestic waste, pursuant to Article 10.4. of the Law, shall submit a "Summary Report on Recycling or Reuse of Domestic Waste" (Form No. 33), describing the corresponding year's recycling or reuse, to the Mayors/County Heads, from his main business office by the end of January of the following year.

2) The businessman, pursuant to Article 21. of the Law, shall submit to the Mayors/Governors a "Summary Report on Generation or Disposal of Industrial Waste" (Form No. 34), describing the corresponding year's generation or disposal of his business office, by the end of January of the following year.

3) Those who recover or reuse domestic waste, pursuant to Article 23.2. of the Law, shall submit a "Summary Report of Recycling or Reuse of Industrial Waste" (Form No. 35), describing the corresponding year's recycling or reuse, to the Mayors/County Heads from his main business office by the end of January of the following year.

4) The handler of industrial waste disposal, pursuant to Article 24. of the Law, shall submit a "Summary Report of Disposal of Industrial Waste" (Form No. 36), describing the corresponding year's disposal, to the head of the regional environmental agency concerned, by the end of January of the following year.

#### Article 61. (Criteria for Administrative Measures, etc.)

The criteria for administrative measures, pursuant to Articles 13.1., 19.1., 24.4., and 26.4. of the Law, are given in Table 9 in the Annex to this Order. The authorities of an administrative measure may waive a criterion for the purpose of environmental preservation or protection of public health.

## Article 62. (Hearing)

1. When a businessman, his representative, or any other person concerned are requested to attend a hearing, pursuant to Article 33. of the Law, the notification of hearing shall be delivered to them 7 days before the hearing. Urgent cases involving environmental preservation or protection of public health may demand an earlier hearing.

2. The businessman, his representative, or any other concerned person notified of a hearing, pursuant to Article 62.1., shall attend the hearing and state or write his opinion in a copy of the notification and submit it to an appropriate agency.

3. When the businessman, his representative, or any other person concerned attends the hearing and states his opinion, pursuant to Article 62.2., the officials shall record the statement and have a signature of the attendant concerned.

## **CHAPTER 5. SUPPLEMENTARY PROVISIONS**

## Article 63. (Standards for the Use of Excreta in Specially Clean Areas)

Night soil may be used for fertilizer, pursuant to Article 36.1. of the Law, if it is treated as follows:

- 1) Sludge which is treated and generated from a final night soil treatment facility
- 2) Solidified waste formed from drying or incineration of night soil
- 3) Night soil transformed into liquid fertilizer by a liquid fertilizer storage facility
- 4) Night soil transformed into organic fertilizer by an organic fertilizer facility.

#### Article 64. (Summary Report of Waste Disposal by Mayors/Governors)

Pursuant to Article 39. of the Law, Mayors/Governors shall report the summary of waste disposal in their areas of jurisdiction using the Form specified by the EA, to the EA, by the end of February of the following year.

#### Article 65. (Fees for Permit, etc.)

Anyone one who intends to apply for a permit of business of domestic waste disposal, registration of business to design and construct domestic waste disposal facilities, business to manufacture night soil treatment tanks or industrial waste disposal, pursuant to Article 40. of the Law, shall pay a fee stipulated in Table 10 in the Annex to this Order. When the permit or registration officer is from the EA or the heads of regional environmental agencies, payment shall be by the coupon of National Government. When the officer is from the Mayors/County Heads, the payment shall be by the coupon of local government. The same shall be applied to the change of permitted or registered items.

#### Article 66. (Consignment of Management and Operation of Waste Disposal Facilities)

Pursuant to Article 41.2. of the Law, the Environment Administration is entitled to entrust the public disposal facilities, already constructed by the stipulation of Article 23.3. of the Law, to the Environmental Contamination Protection Agency, Korean Resources Recycling Corporation, or another qualified person whose ability to manage and operate is accredited by the EA.

#### Article 67. (Procedures for Charging Fines)

Article 14.4. of the Decree stipulates that the revenue agency's official regulations apply to those cases where the EA or the heads of regional environmental agencies charge a fine, and the regulations of the concerned local government apply to these cases where Mayors/Governors charge a fine. In both cases, the charging officer shall note the rebuttal procedure and period in the notification of imposition.

#### ADDENDA TO THE MOHSA ORDER

## Article 1. (Enforcement Date)

This Regulation shall be effective from the date of the implementation of this Regulation. However, the stipulation of Article 12.5.2).d shall be effective on 1 July 1987, and the stipulation of 32.2.).c shall be effective on 1 June 1988.

#### Article 2. (Abrogation of Regulation of Garbage Disposal Law)

The Regulation of the Garbage Disposal Law shall be abrogated.

#### Article 3. (Interim Measures Due to the Abrogation of the Regulation of Garbage Disposal Law)

At the time of implementation of this Regulation, any Law that quotes the abrogated Regulation of Garbage Disposal Law or its stipulations, if there is equivalent stipulation in this Regulation, shall be regarded as quoting from this Regulation or its provisions.

#### Article 4. (Interim Measures on Areas of Public Restroom Compartments)

The standards for areas of restroom compartments stipulated in Article 9.1.5) shall not be applied to restrooms constructed or under construction at the time of implementation of this Regulation. Excluded are expansion, remodeling, or reconstruction according to the stipulations of the Construction Law.

#### Article 5. (Interim Measures on Construction of Flush Toilets)

The owner, occupant, or manager of land or buildings in a specially clean area, who is required to construct flush toilets, pursuant to Articles 9.3.1) or 15.1. of the Regulation, shall change the toilets installed to flush toilets, to be stipulated by the regulations of the special city of Seoul, cities under direct control of the National Government, cities, or counties.

## Article 6. (Interim Measures on Restrooms in Specially Clean Areas)

The standards for the compartment area of restrooms (in specially clean areas) for public use, pursuant to Article 15.3. of the Regulation, shall not apply to restrooms already constructed or under construction at the time of implementation of this Regulation. Excluded are expansion, remodeling, or reconstruction according to the stipulations of the Construction Law.

## Article 7. (Interim Measures on Standards for Construction of Sewage Treatment Facilities and Night Soil Treatment Tanks)

The standards for construction of sewage treatment facilities and night soil treatment tanks already constructed or under construction at the time of implementation of this Regulation shall follow the previous stipulation, instead of Article 30. of this Regulation.

#### Article 8. (Interim Measures on Report of Recycler or Reuser of Industrial Waste)

Anyone who has obtained a permit of business of recycling, pursuant to Article 50.1. of the Environmental Preservation Law, is required to report recycling and reuse of industrial waste, pursuant to Article 23.2. of the Law and Article 45.2. of this Regulation, to the Mayors/Governors of the industrial waste generation areas concerned, by 31 July 1987.

#### Article 9. (Interim Measures on Permit of Construction of Industrial Waste Disposal Facilities)

Anyone who has constructed and operated an industrial waste disposal facility, who was required to obtain a permit of construction of final disposal facilities of industrial waste, pursuant to Article 52.1. of the Environmental Preservation Law, but was required to obtain a permit of construction from the heads of regional environmental agencies pursuant to Article 26.2. of the Law and Article 53. of this Regulation, shall comply with the standards for construction in Article 52. within 1 year of implementation of this Law. The applicant shall then submit an "Application for Use of Industrial Waste Disposal Facility" (Form No. 26) or for an industrial waste landfill facility, an "Application for Use of Industrial Waste Landfill Facility" (Form No. 27) to the regional environmental agency in charge of the area where the facility is located, within 1 year from the day of implementation of this Regulation.

#### Article 10. (Interim Measures on Report of Businessmen Who Generate Industrial Waste)

Pursuant to Article 42.1., any businessman generating industrial waste at the time of implementation of this Regulation shall submit a "Report on Generation of Industrial Waste" (Form No. 14) to Mayors/Governors of the areas where the waste facility is located, by 31 August 1987.

#### Article 11. (Interim Measures on Requirements for Permit and Registration)

Anyone to be permitted or registered, pursuant to Article 3. in the Addenda of the Waste Management Law, Law No. 3904, at the time of implementation of this Regulation, shall comply with the requirements for permit or registration within 1 year from the date of implementation of this Regulation.

#### Article 12. (Interim Measures on Reissues of a Certificate of Registration or Permit)

The registration or permit agencies concerned shall issue a new certificate of registration or permit to anyone who has obtained a registration of business to design or construct night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, or to anyone who has obtained a permit of business of industrial waste disposal by the time of the implementation of this Regulation, by 30 June 1987.

## Article 13. (Interim Measure's on Application of Administrative Actions)

The previous stipulations for administrative actions shall be applied to anyone who is under process of administrative actions at the time of implementation of this Regulation.

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## Table 1

## Types of Industrial Waste (Related to Article 2)

#### 1. Special Industrial Waste

1) Special hazardous industrial waste refers to industrial wastes with the following criteria as a result of extraction procedure (EP) test:

a. Cadmium or its compounds: Cadmium contents with 0.1 mg per L or more in the extraction liquid

b. Cyanide compounds: Cyanide contents with 1 mg per L or more in the extraction liquid

c. Organic phosphorus compounds: Organic phosphorus contents with 1 mg per L or more in the extraction liquid

d. Lead and its compounds: Lead contents with 1 mg per L or more in the extraction liquid

e. Hexavalent chromium or its compounds: Hexavalent chromium contents with 0.5 mg per L or more in the extraction liquid

f. Arsenic and its compounds: Arsenic contents with 0.5 mg per L or more in the extraction liquid

g. Mercury and its compounds: Mercury contents with 0.005 mg per L or more in the extraction liquid

h. PCB or PCP and its compounds: PCB or PCP contents with 0.003 mg per L or more in the extraction liquid

i. Copper and its compounds: Copper contents with 3 mg per L or more in the extraction liquid

j. Any other cases which include hazardous substances specified by the EA.

2) Waste oil:

- a. Lubricants
- b. Mineral oils except lubricants
- c. Animal and vegetable oils

d. Tar pitches: solid-state at room temperature

e. Solvents

f. Waste which includes waste oils containing a. through e.

3) Waste synthetic resins:

a. Synthetic resins: including liquids

b. Synthetic textiles: Including synthetic textiles woven with natural fiber, but limited to the textile industry and apparel manufacturing businesses having 20 power sewing machines or more

c. Synthetic rubbers: Limited to wastes generated from the manufacture of synthetic rubber and synthetic rubber products, synthetic rubber processing or repairing, and waste tires

d. Synthetic leather: Including fabric materials containing synthetic leather

e. Other waste synthetic polymers.

4) Waste acids and alkalis:

a. Waste hydrochloric acid

- b. Waste sulfuric acid
- c. Waste nitric acid
- d. Waste caustic soda liquid
- e. Other wastes not listed in a. through d. with pH values of less than 2.0, or more than

12.5.

2. General industrial waste refers to the following wastes with total average generation of 50 kg per day or more:

1) Organic industrial waste

a. Waste papers: Limited to manufacturing pulp, paper and paper products treated with PCBs

b. Waste wood: Limited to wood treated with special hazardous substances and pitches defined in Article 2, Number 13, of the Environmental Preservation Law

c. Waste leather: Limited to wastes generated from the process of manufacturing of leather and leather products (including wool products)

d. Animal and vegetable solid residues: Limited to wastes generated from the process of food (excluding bean curd, edible oil, and kimchi), medicine, and spice production

e. Waste rubbers: Limited to wastes generated from manufacture of natural rubber, natural rubber products, and processing or repair of natural rubbers

f. Animal excreta: Limited to discharges from permitted livestock facilities pursuant to Article 15 of the Environmental Preservation Law

g. Sludges: Limited to sludges (Inorganic sludges are included. The same applies hereafter.) generated from permitted facilities, pursuant to Article 15 of the Environmental Preservation Law.

3. Inorganic Industrial Wastes

a. Scrap metals: Limited to metal debris and equivalent generated from metal grinding and cutting processes

b. Scrap ceramics: Limited to wastes from the ceramic products manufacturing process

c. Scrap ores: Limited to undissolved ores discharged from chemical dissolution or slugs discharged from melting ores

d. Combustion ashes: Limited to combustion residues and debris from cleaning combustion facilities related to mining, manufacturing, and electric industries

e. Construction debris: Limited to construction debris generated from the removal of structures (Individual houses are excluded.) related to construction business

f. Particulate matter: Limited to particulate matter collected by air pollution control devices pursuant to Article 2.14) of the Environmental Preservation Law, related to mining, manufacturing, and electrical industries

g. Waste sand: Limited to wastes from casting, shipbuilding industries, and ready-mixed concrete production

h. Waste asbestos: Limited to wastes from the manufacture of asbestos and asbestos products.

### Table 2

## Permit Requirements for Domestic Waste Disposal Business (Related to Article 19)

	Type of Business	Technical Capabilities	Facilities and Equipments
T.	1. Excreta collection	2 workers or more	Office: 15 $m^2$ or more 1 or more vacuum suction vehicles (total capacity of 7,500 L or more for the special city of Seoul, cities under direct control of the national government, and other cities, and 3,600 L or more for other areas)
4	. Waste collection and transportation	4 workers or more for collection and transportation of refuse	Office: more than 15 $m^2$ 1 or more transportation vehicles (with a loading capacity of 7 waste tons or more, including one vehicle with a compactor for the special city of Seoul, cities under direct control of the national government, 8 tons or more for cities with populations of more than 200,000, and 4 tons for other areas)
'n	. Night soil treatment	Environmental engineer: 1 or more Chemical engineer: 1 or more Mechanical engineer: 1 or more	Office: 33 m <sup>2</sup> or more Laboratory: 33 m <sup>2</sup> or more 1 or more night soil treatment facilities, pursuant to Article 3 1 or more sets of experimental equipment to monitor the following items: BOD, suspended matter, and the number of coliform
4	. Waste disposal business	Environmental engineer: 1 or more	Office: 33 $m^2$ or more Laboratory: 15 $m^2$ or more 1 or more refuse disposal facility (landfill facility) pursuant to Article 5
[]	<ol> <li>Specialized in landfill</li> </ol>	Chemical Engineer: 1 or more Mechanical Engineer: 1 or more	More than 1 set of experimental equipment to monitor the following items: BOD and suspended materials
6)	2) Specialized in incineration	Environmental or chemical Engineer: 1 or more Mechanical engineer: 1 or more Electrical engineer: 1 or more	Office: 33 $m^2$ or more Laboratory: 33 $m^2$ or more 1 or more refuse disposal (incineration) facility pursuant to Article 5 1 or more set of experimental equipment to monitor the following items: SO <sub>2</sub> , HCl and particulate matter

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	Permit Requirements for Domestic Waste I (Related to the Article 19)	t Requirements for Domestic Waste Disposal Business (Related to the Article 19)
Type of Business	Technical Capabilities	Facilities and Equipments
<ol> <li>Specialized in recovery or composting</li> </ol>	Environmental or chemical engineer: 1 or more; Mechanical or electrical engineer: 1 or more	Office: 33 $m^2$ or more 1 or more refuse disposal facility (recovery or compost facility) pursuant to Article 5
<ol> <li>Treatment tank cleaning (sewage treatment facility, night soil treatment tank, and livestock wastewater treatment facility)</li> </ol>	Environmental engineer (water quality), hygienist, or sewage treatment engineer: 1 or more	Office: 15 m <sup>2</sup> or more Vacuum suction vehicle (total treatment capacity of 7,500 L for the special city of Seoul and cities under direct control of the national government, 3600 L or more for other areas)

÷ 5 \*Note: In cases where one intends to obtain a permit for more than two types of disposal business, duply required.

### Table 3

## Checklists for Domestic Waste Disposal Facilities (Related to Articles 32 and 56)

Checklist

Classification

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1. Night soil treatment facility	
Anaerobic digestion tank	Supernatant quality (BOD), suspended matter, temperature, PH, mixing conditions of excreta, amount of gas generation, scum conditions
Aerobic digestion tank	Supernatant quality (BOD), suspended matter, air supply conditions, dissolved oxygen (DO), scum conditions
Activated sludge	Hydraulic retention time, air supply conditions, DO, sludge volume (SV), microbiological conditions
Settling tank	Effluent quality (BOD, suspended matter, the most probable number of coliforms [MPN]), ratio of return sludge
Sterilization tank	Amount of residual chlorine
Equipment	Performance of equipment, replacement of broken equipment

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Classification	Subclass	Checklist
2. Refuse disposal facility		
Landfill facility	Operation and maintenance	Water quality of effluent (BOD), facility effect on public water area and groundwater
	Landfill	Conditions of soil cover, compaction, and safety against
Incineration	Combustion facility	Amount of air supply, temperature at offgas
		Function of particulate collecting equipment, function of removal equipment of HCL and SO <sub>x</sub>
	Pollution prevention facility	Concentration of stack emissions (HCL, SO <sub>x</sub> , and particulate matter)
	Recovery, composting, refuse transfer facility and other refuse disposal facilities	Temperature in and amount of air to the reactor (only for composting facility) function of pollution control equipment and condition of repair and maintenance of equipment

## Check Lists for Domestic Waste Disposal Facilities (Related to Articles 32 and 56)

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sificatio
Class

Checklist

3. Sewage treatment facility

3. Sewage treatment facility	
Extended aeration method	Conditions of maintenance of each piece of equipment; DO of aeration tank; appropriate removal of sludge
Standard activated sludge method	Conditions of maintenance of each piece of equipment; DO of activated sludge tank; appropriate removal of sludge
Contact oxidation method	Conditions of maintenance of each piece of equipment; contact aeration tank; appropriate removal of sludge
Contact stabilization method	Conditions of maintenance of each piece of equipment; DO of contact tank; appropriate removal of sludge
Trickling filter method	Conditions of maintenance of each piece of equipment; clogging of filter; appropriate removal of sludge
Imhoff tank method	Conditions of maintenance of each piece of equipment; appropriate removal of sludge
Rotating biological contactor method	Conditions of maintenance of each piece of equipment; condition of biofilm of rotating disk; appropriate removal of sludge
Effluent quality	BOD; suspended matter
Equipment	Function of main pieces of equipment
4. Night soil treatment tank	
Septic tank	Excessive generation of scum; emission of odors; appropriate removal of sludge
Imhoff tank method	Function of sedimentation and digestion chamber; excessive generation of scum; emission of odors; appropriate

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removal of sludge

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## Check Lists for Domestic Waste Disposal Facilities (Related to Articles 32 and 56)

Classification	Checklist
Acration method	Operation of aeration tank and DO; excessive generation of scum, emission of odors; appropriate removal of sludge
Contact aeration method	Condition of contacting medium; excessive generation of scum; emission of odors; appropriate removal of sludge
Trickling filter method	Clogging of media; excessive generation of scum; emission of odors; appropriate removal of sludge
Spraying septic tank	Clogging of piping; excessive generation of scum; emission of odors; appropriate removal of sludge
Effluent quality	BOD; suspended matter
Equipment	Function of main pieces of equipment
5. Livestock wastewater treatment facility	
Storage fertilization	Leakage; amount of wastewater in detention basin and detention period; sprinkling conditions of stabilized livestock excreta (fertilized)
Landfill method	Condition of excreta landfill; thickness cover; leakage of excreta landfilled
Compost method	Level of dryness; ventilation rate of ventilation equipment; degree of composting in compost facility

## Check Lists for Domestic Waste Disposal Facilities (Related to Articles 32 and 56)

Classification	Checklist
Soil penetration method	Suspended matter; drop of water level; collection in underground catch basin
Trickling filter method	Scum generation in trickling-filter method facilities; amount of sludge in settling tank
Oxidation lagoon method	Amount of sludge sedimentation in settling basin; separation of supernatant or degree of dilution; degree of oxidation in lagoon
Effluent quality	BOD

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Table 4

# Registration of Requirements for Design/Construction (D/C) Business of Domestic Waste Treatment Facilities (Related to Article 36)

Qualification Technical Capability Consection Professional Engineer (PE) Proverwater system in Civil Engineering or PE
the
Environmental or chemical engineer: 1 or more
Anyone licensed for water/wastewater systemCivil Engineer: 1 or more mistallation withinwater/wastewater system installation withinMechanical engineer: 1 or morespecialized construction business or for general construction, pursuant to the 

Type	Qualification	Technical Capability	Facility and Equipment	Capital or Assets
Sewage treatment facility D/C business	Anyone licensed for water/wastewater system installation within specialized construction business or for general construction, pursuant to the Law of Construction Business	Civil engineer: 1 or more Mechanical engineer: 1 or more Environmental or chemical engineer: 1 or more	Office: 33 m <sup>2</sup> or more Laboratory: 15 m <sup>2</sup> or more Laboratory equipment: COD, suspended matter, residual chlorine and chlorine ions	Corporation: 50 million won or more in capital Individual: 70 million won or more in estimated assets
Night soil treatment tank D/C business	Anyone licensed for water/wastewater system installation within specialized construction business or for general construction, pursuant to the Law of Construction Business	Civil or construction engineer: 1 or more Environmental or chemical engineer: 1 or more	Drafting table: 1 or more sets Office: 33 m <sup>2</sup> or more Laboratory equipment: COD measurement equipment announced by EA Drafting table: 1 or more sets	Corporation: 50 million won or more in capital Individual: 70 million won or more in estimated asset

Capital or Assets	ore Corporation: 50 million won in capital or more Individual: 70 million won ipment or more in estimated assets more	
Facility and Equipment	Office: 33 m <sup>2</sup> or more Laboratory: 15 m <sup>2</sup> or more COD measuring equipment announced by EA Drafting table: 1 or more	ed office, laboratory in the concerned area, technical field.
Technical Capability	Civil engineer: 1 or more Environmental or chemical engineer: 1 or more	more than two types disposal business, duplicated office, laboratory ad. nents can be substituted by a person with a PhD in the concerned are to has worked 5 years or more in the concerned technical field.
Qualification	Anyone licensed for water/wastewater system installation within specialized construction business or for general construction, pursuant to the Law of Construction Business	<ol> <li>For those who intend to obtain a permit of more than two types disposal business, duplicated office, laboratory and experimental equipment are not required.</li> <li>The PE in the technical capability requirements can be substituted by a person with a PhD in the concerned area, with a first class engineer qualification, who has worked 5 years or more in the concerned technical field.</li> </ol>
Type	Livestock wastewater treatment facility D/C business	Notes: 1. For those who intend to obtain a permit of and experimental equipment are not require 2. The PE in the technical capability requirem with a first class engineer qualification, wh

ž 83 3. When a businessman has contracted with an outside laboratory for the measurement of individual items, pursuant to Article 22-2 of the Environmental Preservation Law, the laboratory equipment requirement for those items may be waived. If the contract covers all the measurements, both laboratory and laboratory equipment requirements may be waivered.

### Table 5

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### **Requirements for Registration of Night Soil Treatment Tank Manufacturing Business (Related to Article 38)**

Technical Capability	Facility and Equipment	Capital or Estimated Assets
Chemical engineer: 1 or more	Factory site: 3000 m <sup>2</sup> or more	Corporation: 10 million won or more in capital
	Building area: 1000 m <sup>2</sup> or more	
	Manufacturing facility: when materials are polyethylene or vinylchloride resin, injection mold, melting mold, form; when materials are reinforced plastic, sprayer, compressor, hardening chamber (maintain temperature at 30-60 °C using hot air), cutting machine, mo'd, roller	Individual: 20 million won or more in estimated assets
	Laboratory instruments to measure the following items to be announced by the EA: strength of material, extension ratio, thickness, chemical resistance, moisture content, and hardness; BOD and suspended matter	

Note: A technical person with two or more technical qualifications will be regarded as two or more technical persons with qualifications.

### Table 6

Classification	Structure and Specification	Performance
1. Septic tank meth	od	
Sedimentation and digestion chamber (septic chamber)	1) Partition into 2 to 4 chambers and connect them in series	50% or more BOD removal
	<ul> <li>2) Ensure that total effective capacity is</li> <li>1.5 m<sup>3</sup> or more and add 0.5 m<sup>3</sup> for every</li> <li>5 estimated users more than 5</li> </ul>	
	3) Effective capacity for the 50% or more BOD received for the first chamber in a two-chamber tank shall be two thirds of the total effective capacity, or half the effective capacity in a 3- or 4-chamber tank. Filtering equipment shall be placed in the final chamber and the sewage shall pass through the bottom of the equipment. The volume of crushed stone layer or the equivalent filter layer must be 5 to 10% of the total effective capacity and will be added to the corresponding effective capacity	
	<ul> <li>4) The effective depth of each chamber shall be 1-3 m, and the opening of the inflow duct should be located at one-third of the effective depth from the surface. The outflow duct or an opening at the lower part of the partition wall should be located at half the</li> <li>effective depth from the surface, or an appropriate number of longitudinal slots, 3 cm wide and spaced 6 cm apart, located at the same depth as each partition wall, with provisions to prevent carryover of suspended matter or scum.</li> </ul>	
	5) The inflow duct for the first chamber shall be a "T"-shaped pipe. When installing the partition wall with an opening or "T"-shaped pipe, an inspection manhole shall be provided. The diameter of the "T"-shaped pipe shall be 10 cm or more.	
	6) A manhole for removal of sludge shall be provided.	

### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

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Classification	Structure and Specification	Performance
2. Imhoff Tank M	ethod	
Sedimentation and digestion chamber	<ol> <li>The digestion chamber shall be installed below the sedimentation chamber. The sewage flows into the sedimentation chamber via the digestion chamber, and the location of the inlet shall be one-third of the effective depth from the surface.</li> <li>Effective capacity shall be 1.5 m<sup>3</sup> or more; add 0.5 m<sup>3</sup> per every 5 estimated users more than 5.</li> </ol>	50% or more of BOD reduction
Sedimentation chamber	1) Effective capacity shall be 0.1 m <sup>3</sup> or more; add 0.1 m <sup>3</sup> per every 5 estimated users from 5-50; for more than 50, add 0.05 m <sup>3</sup> per every 5 estimated users.	
	2) The sedimentation chamber shall be structured to prevent carryover of suspended slids or scum.	
	3) The hopper slope of the sedimentation chamber shall be more than 50 degrees from level and the overlap of the opening shall be longer than the opening width so that suspended solids in the digestion chamber shall not enter the sedimentation chamber.	
	4) The hopper opening width shall be between 3 and 10 cm and shall be structured to prevent clogging.	

### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

Classification	Structure and Specification	Performance
Digestion chamber	1) The capacity of the chamber from 10 cm below the tip of the sedimentation chamber hopper shall be $0.3 \text{ m}^3$ or more; add $0.3 \text{ m}^3$ for every 5 estimated users more than 5.	
Scum chamber	1) Surface area of the scum chamber shall be more than 25% but less than 30% of the total surface area (of the Imhoff tank).	
3. Aeration Method	I	
Septic chamber	1) Effective capacity shall be 0.75 $m^3$ or more; add 0.45 $m^3$ for every 5 estimated users more than 5.	50% or more of BOD removal
Aeration chamber	1) Effective capacity shall be 0.45 $m^3$ or more; add 0.3 $m^3$ per every 5 estimated users more than 5.	
	2) Air diffusion mechanism shall mix sewage homogeneously and supply enough oxygen to maintain the DO level at 0.3 ppm or higher.	
Final settling chamber	1) Effective capacity shall be 0.15 $m^3$ or more; add 0.1 $m^3$ for every 5 estimated users more than 5.	
	2) The chamber shall be structured to facilitate rapid settling of influent solids and to return all settled sludge to the aeration chamber.	
	3) The chamber shall be structured to reduce floating scum and the escape of suspended matter.	

### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

Classification	Structure and Specification	Performance
4. Contact Aeratio	on Method	
Septic chamber	The septic chamber shall be equivalent to the digestion chamber in the aeration method.	50% or more of BOD removal
Contact aeration chamber	1) Effective capacity shall be 0.25 $m^3$ or more; add 0.125 $m^3$ for every 5 estimated users more than 5.	
	2) Contact media shall be shaped to prevent clogging by biofilm, yet to facilitate the adhesion of biofilm. The net media volume shall be 50% or more of the effective capacity.	
	3) The air diffusion mechanism shall mix sewage homogeneously and supply enough oxygen to maintain a DO level of 0.3 ppm or higher.	
	4) The chamber shall be designed to return sloughed biomass to the digestion chamber.	
Final settling chamber	1) Effective capacity shall be $0.15 \text{ m}^3$ or more; add $0.075 \text{m}^3$ for every 5 estimated users.	
	2) The chamber shall be structured to facilitate rapid settling of influent solids to reduce floating scum and to prevent the escape of suspended matter.	
5. Trickling Filter	Method	
Septic chamber	Shall be equivalent to the septic chamber for the septic tank method	50% or more BOD removal
Contact aeration chamber	1) Filtration volume shall be 0.75 $m^3$ or more; add 0.25 $m^3$ for every 5 estimated users more than 5.	50% or more of BOD removal

### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

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Classification	Structure and Specification	Performance
	2) The depth of filter media shall be at least 0.9 m but not more than 2 m.	
	3) The diameter of filter media shall be at least 5 cm but not more than 7.5 cm, hard crushed stone or an equivalent that will support aerobic biofilm.	
	4) When a trickling filter barrel is used, the clearance between the bottom of the barrel and the filter media shall be 10 cm or more.	
	5) The clearance between the tank bottom and the filter media retainer shall be 10 cm or more, to promote ventilation.	
	6) Ventilation such as a vent pipe or aeration holes shall be furnished.	
	7) The chamber shall be structured to spray sewage evenly on the filter media.	
6. Trickling Filte	r Type Septic Tank Method	
Septic chamber	1) Effective capacity shall be $0.1 \text{ m}^3$ or more; add $0.4 \text{ m}^3$ for every 5 estimated users more than 5; the opening of the inflow duct should be located at one-third the effective depth from the surface.	50% or more of BOE removal
	2) The effective depth shall be 1 m or more.	
	3) The final outlet shall be furnished with a preliminary filter with provisions to prevent suspended or settled matter around the filter.	

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### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

Classification	Structure and Specification	Performance
Preliminary filter	1. Effective capacity shall be about 1/30 of the effective capacity of the septic chamber, which should be filled with the proper media.	
	2) Location of the opening shall be one-fourth of the effective depth below the chamber water level. The portion of the preliminary filter in the septic tank will be counted as septic chamber capacity.	
Trickling filter	1) Filtration volume shall be 0.07 $m^3$ or more; add 0.02 $m^3$ for every 5 estimated users more than 5.	
	2) The effective depth shall be 0.12 m or more.	
	3) A trickling filter barrel shall be furnished, and the sewage from the preliminary filter shall be sprayed evenly on the media surface.	
	4) Filter media shall be made with plastic or equivalent material that will sustain aerobic biofilm, and shall have a surface area ratio of 200 m <sup>2</sup> /m <sup>3</sup> or more, and a void ratio of 90% or more.	
Oxidation plates	1) Oxidation plates shall be placed under the trickling filter. The effective area shall be 0.6 $m^2$ or more; add 0.2 $m^2$ for each 5 estimated users more than 5.	
	2) The surface of the oxidation plates shall be coarse enough to sustain biofilm.	
	3) Oxidation plates shall be arranged so that sewage shall flow through the oxidation plates out of the effluent duct.	

### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

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Classification	Structure and Specification	Performance
Others	1) Trickling filter and oxidation plates shall be furnished with a ventilation device such as pipes or aeration holes to promote the formation of aerobic biofilm.	
	2) All structures shall be designed to facilitate cleaning.	
	3) The height of the effluent port of a night soil treatment tank shall be higher than the sewer line.	

### Standards for Structure, Specification, and Performance of Night Soil Treatment Tank (Related to Article 40)

	Classification	Special Industrial Waste Disposal Business	General Industrial Waste Dismosal Business	Industrial Waste Landfill
-			scalling models	Scalligud
	1. Technical Capability, Capi	1. Technical Capability, Capital, Office Area, and Laboratory		
	Technical capability	<ol> <li>Environmental engineer, air and water quality: 1 or more for each</li> </ol>	<ol> <li>Environmental engineer, air and water quality: 1 or more for each</li> </ol>	1) Environmental engineer, water quality: 1 or more for each
		<ol> <li>Chemical engineer or chemical analysis technician:</li> <li>1 or more</li> </ol>	2) Chemical engineer or chemical analysis technician:1 or more	<ol> <li>Chemical engineer or chemical analysis technician: 1 or more</li> </ol>
92		3) Mechanical, electrical, or civil engineer: 1 or more	3) Mechanical, electrical, or civil engineer: 1 or more	3) Civil engineer: 1 or more
	Capital or assets	1) Corporation: 100 million won or more	1) Corporation: 100 million won or more	1) Corporation: 100 million won or more
		2) Individual: Estimated assets 200 million won or more	2) Individual: Estimated assets 200 million won or more	2) Individual: Estimated assets 200 million won or more
	Office	Area: 33 m <sup>2</sup> or more	Area: 33 m <sup>3</sup> or more	Area: 33m <sup>3</sup> or more

Table 7

	Permit Requirements for In	Requirements for Industrial Waste Disposal Business	
Classification	Special Industrial Waste Business	General Industrial Waste Disposal Business	Industrial Waste Landfill Disposal Business
1 aboratory	1) Area: 20 m <sup>2</sup> or more	1) Area: $20 \text{ m}^2$ or more	1) Area: 20 m <sup>2</sup> or more
	2) Conditions	2) Conditions	2) Conditions
	a. Lab shall be built on the business premises but shall have separate space.	Same lab conditions apply as for special industrial waste disposal business.	a. Shall be built in the vicinity of landfill site and shall have separate space.
03	b. Floor or wall shall be built with water- and fire- resistant materials such as cement or the equivalent.		b. Same as (2) through (6) for special industrial waste disposal business
	c. Lab benches shall be solidly built of wood or metal.		
	d. Proper lighting and ventilation shall be provided.		
	e. Water and cleaning system and sink shall be provided.		
	f. The laboratory shall be ready for analysis at any time.		

## Permit Requirements for Industrial Waste Disposal Business

Classification Specifica

Specifications

2. Transportation equipment, storage facility, laboratory instruments, and equipment

1) Cargo area (of the vehicle) 2) Top of the cargo area shall and bottom (of the container) tank trolley or container shall industrial waste shall display from scattering and spilling, industrial waste or waste oil, have a capacity of at least 3 be covered to prevent waste 3) For special hazardous transportation vehicle for and to minimize odors 4) Both sides of the shall be watertight. ш<u>.</u> container (limited to business Transportation vehicle and industrial waste disposal for special and general business)

written permanently in black

the name of the business

print on a white background

(50 cm x 20 cm).

Permit Requirements for Industrial Waste Disposal Business

Classification

Specifications

5) Any vehicle transporting special industrial waste (except waste resins) shall display an attached or painted sign on both front and back of the vehicle that reads: "Special Industrial Waste Transportation Vehicle," in red print on a white background (50 cm x 20 cm).

1) Storage facilities shall be partitioned for different wastes.

2) Total storage capacity shall be  $100 \text{ m}^3$  or more; capacity for each partition shall be  $50 \text{ m}^3$  or more.

 Storage facilities shall be equipped to prevent scattering, leaking, spilling, and soil penetration of wastes, emission of odors, and inclusion of storm water.

Storage facility (all

businesses)

## Permit Requirements for Industrial Waste Disposal Business

5.001	
2000	Sal)

Specifications

4) Storage facilities shall be furnished with fire equipment to prevent fire. 5) Storage facilities for waste equivalent to toxic or acute toxic material, pursuant to the Toxic and Acute Toxic Materials Law, shall abide by the stipulations of the Law; the total capacity shall be the same as stipulated in paragraph b.

> Laboratory instruments and equipment (for all businesses)

2) Dryer (200 °C or higher): 1

or more

1) Chemical balance: 1 or

more

3) Water distillation kit (4L/hr

or more): 1 or more

 Water bath ( Electrical heating type): 1 or more
 Electric heater (500 W or more): 1 or more

Permit Requirements for Industrial Waste Disposal Business

6) Electric fumace (900 °C or vibration frequency 200cycle): 7) Vacuum pump (1/4 HP or 8) pH meter (glass electrode 9) Liquid gravimeter (19 or 12) Reagent and glassware 10) Lab bench and reagent a. Beaker 100, 250, 500, (vibration width 4-5 cm, 11) Vibrating extractor more/set): 1 or more cabinet: 1 or more higher): 1 or more more): 1 or more type): 1 or more hutch: 1 or more 13) Glassware Specifications 1 or more Classification

1000ml: 5 or more each

## Permit Requirements for Industrial Waste Disposal Business

Classification	Specifications
	b. Volumetric flask 100, 250, 500ml: 5 or more each
	c. Elenmyer flask 100, 250, 500 ml: 5 or more each
	d. Mass Cylinder 50, 100, 250 ml: 5 or more each
QR	e. Burette 20, 50 ml: 2 or more each
	f. Mess pipette 5, 10, 25 ml: 3 or more each
	g. More pipette 5, 10, 20, 50 ml: 2 or more each
	h. Suction flask 1000 ml: 1 or more
	i. Desiccator (20 cm or more): 1 or more
	j. Rootze (11cm): 1 or more
	k. Glass filtering set (G2 or equivalent): 2 or more

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## Permit Requirements for Industrial Waste Disposal Business

Classification	Specifications
	<ol> <li>Reagent bottles 100, 500 ml: 10 or more each</li> <li>Separator funnel 500, 1000 ml: 3 or more each</li> </ol>
(Lab instruments that shall be added for special hazardous industrial waste disposal)	
	1) Photometer, spectropho- tometer, or atomic adsorption photometer: 1 or more
	<ol> <li>Cas chromatograph (GC)</li> <li>(with Electron Capture</li> <li>Detector (ECD)): 1</li> </ol>
	<ol> <li>Kudema-Danish condensor</li> <li>(limited for companies having GC): 1</li> </ol>
(Lab instruments that shall be added for waste oils disposal)	

## Permit Requirements for Industrial Waste Disposal Business

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Classification	Specifications	
	<ol> <li>Round bottom flask 500, 1000 ml: 2 or more each</li> <li>Condensor (cooling): 2 or more</li> </ol>	
	3) Separatory funnel: 2 or more	
<b>3.</b> Disposal Facility and Equipment	lipment	
Special industrial waste disposal business	Special hazardous industrial waste	<ol> <li>Destruction Facility</li> <li>a. High temperature</li> </ol>
		destruction method
		a) Type, structure, and capability shall comply with the standards for incineration of waste oils.
		b) The temperature of offgas shall be 1100 °C or higher.
		c) The facility shall be structured to maintain gas retention time in the destruction chamber 3 s or more.

<ul> <li>e) The facility must be furnished with a thermometer for destruction temperature.</li> <li>b. The facility must use an oxidation, reduction, or fixation method.</li> <li>a) Facility capacity shall be 5 tons or more per day.</li> <li>b) The facility shall be 6 composed of a chemical feed composed comp</li></ul>	Classification	Disposed Waste	Specifications
			e) The facility must be furnished with a thermometer for destruction temperature.
			b. The facility must use an oxidation, reduction, or fixation
			a) Facility capacity shall be 5 tons or more per day.
<ul> <li>2) Cement Solidification Facility</li> <li>a. Capacity shall be 1 ton or more per day.</li> <li>b. The facility shall be equipped with one or more cement mixers.</li> </ul>			<ul> <li>b) The facility shall be composed of a chemical feed control device, mixing device, filtration unit, sedimentation and neutralization units.</li> </ul>
<ul> <li>a. Capacity shall be 1 ton or more per day.</li> <li>b. The facility shall be equipped with one or more cement mixers.</li> </ul>			2) Cement Solidification Facility
b. The facility shall be equipped with one or more cement mixers.			a. Capacity shall be 1 ton or more per day.
			b. The facility shall be equipped with one or more cement mixers.

## Permit Requirements for Industrial Waste Disposal Business

102	<ul> <li>c. The facility shall be equipped with 1 set or more of equipped with 1 set or more of compression molds (including accessories).</li> <li>d. The floor shall be built or paved of waterproof materials.</li> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup> or more (Landfill capacity or more (Landfill capacity</li> </ul>
102	<ul> <li>c. The facility shall be equipped with 1 set or more of compression molds (including accessories).</li> <li>d. The floor shall be built or paved of waterproof materials.</li> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup> or more (Landfill capacity or more (Landfill capacity</li> </ul>
102	<ul> <li>c. The facility shall be equipped with 1 set or more of compression molds (including accessories).</li> <li>d. The floor shall be built or paved of waterproof materials.</li> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup> or more (Landfill capacity</li> </ul>
102	<ul> <li>accession molds (including accession molds (including accessories).</li> <li>d. The floor shall be built or paved of waterproof materials.</li> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup> or more (Landfill capacity</li> </ul>
102	<ul> <li>d. The floor shall be built or paved of waterproof materials.</li> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup> or more (Landfill capacity</li> </ul>
102	<ul> <li>paved of waterproof materials.</li> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup></li> <li>or more (Landfill capacity</li> </ul>
102	<ul> <li>3) Landfill Facility</li> <li>a. The area shall be 3300 m<sup>2</sup></li> <li>or more (Landfill capacity</li> </ul>
102	a. The area shall be 3300 m <sup>2</sup> or more (Landfill capacity
2	a. The area share of 3000 III or more (Landfill capacity
	10,000 m <sup>3</sup> or more) (Excluded
	are the cases when landful is contracted with an industrial
	waste landfill contractor, or the
	right is obtained to use the
	public disposal facilities, pursuant to Article 23-3 of the
	Law).
	b. Each landfill site shall be
	equipped with a waste
	spreader, compaction and cover
	equipment for waste
	transportation vehicles.

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Classification     Disposed Waste     Specifications       Classification     Circuid value     c. Each landfill site shall have the necessary provisions to prevent pollution of public watershed or groundwater.       d.     Each landfill site shall have a system to prevent leachate prenetration into soil and a system to treat collected leachate.       e.     Each landfill site shall have montor wells to check for groundwater contamination.       f.     Each landfill site shall have montor wells to check for groundwater contamination.       f.     Each landfill site shall have montor wells to check for groundwater contamination.       g.     Each landfill site shall have montor wells to check for groundwater contamination.       g.     Each landfill site shall have montor wells to check for groundwater contamination.
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	Permit Requirements for Ind	Requirements for Industrial Waste Disposal Business
Classification	Disposed Waste	Specifications
104		and 210 kg/cm <sup>2</sup> in compression strength measured by Korean Industrial Specification F-2405 (Compression strength for concrete) or the equivalent. b) Each partition shall be 50 m <sup>2</sup> or less in area and 250 m <sup>3</sup> or less in capacity. The inner wall shall be of concrete, 10 cm or more thick, with the same compression strength as
		a) or the equivalent.
STID DISP M	1) ULI ANN WALET SEPARAHON facility	
	a. Treatment capacity shall be 10 m <sup>3</sup> or more per day.	
	b. The facility shall have a treatment capacity to reduce the oil concentration in water phase to 5 ppm or less.	
	c. The facility shall be built so that waste oil cannot escape.	

Table 7 (Cont'd)

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Permit Requirements for Industrial Waste Disposal Business

Classification	Disposed Waste	Specifications
	d. The facility floor and inner walls shall be built or paved with water- and fire-resistant materials.	
	e. The facility shall be equipped to contain spills of waste oil in case of emergency.	
	2) The facility shall provide storage for recovered oil	
	a. Facility capacity shall be 10 m <sup>3</sup> or more.	
	<ul> <li>b. Storage tanks shall be made of materials that prohibit leaks of recovered oil.</li> </ul>	
	c. The front of the storage tank shall be labeled with capacity and contents name.	
	3) Incineration facility	
	a. The facility shall contain one or more continuous	

## Permit Requirements for Industrial Waste Disposal Business

Classification	Disposed Waste	Specifications
	combustion type, mechanical batch or fixed batch type incinerators.	
	b. Incineration capacity shall be 5 tons or more per day.	
	<ul> <li>c. Temperature of the combustion chamber exit shall be 700 °C or more.</li> </ul>	
	d. The inner wall of the combustion chamber shall be made of high-temperature resistant, durable, fire-resistant material.	
	e. The outside of the chamber shall be covered with still plate.	
	f. The combustion chamber shall be furnished with a combustion controller and an air supply controller.	
	g. The main body of the combustion chamber shall be	

Table 7 (Cont'd)	Permit Requirements for Industrial Waste Disposal Business	ification Disposed Waste Specifications	painted in one color or shall be covered with insulation.	h. A thermometer shall be furnished to measure combustion temperature.	i. A heat-resistant sight glass shall be furnished to view inside the combustion chamber.	j. The facility shall be furnished with: a device to control combustion temperature, a combustion controller, ventilation equipment, combustion gas, and cooling equipment.	k. The facility shall have provisions to prevent scattering of ashes while cooling combustion ashes.	4) Landfill Facility	a. The area shall be $3300 \text{ m}^2$ or more $\Omega$ and fill canacity
		Classification							

## Permit Requirements for Industrial Waste Disposal Business

Classification	Disposed Waste	Specifications
	are the races when landfill is	
	contracted with an industrial	
	waste landfill contractor, or the	
	right is obtained to use public disposal landfill facilities.	
	pursuant to Article 23-3 of the Law).	
	t m_ t 1 = 20 = 200 = 200 = 1 = 1	
	0. Each landful site shall be equipmed with a waste	
	spreader, compaction and cover	
	equipment, and washing	
	equipment for waste transportation vehicles.	
	c. Each landfill site shall have	
	necessary provisions to prevent	
	publicity of public watched	
	d. Each landfill site shall have	
	a system to prevent leachate	
	penetration into soil and to treat collected leachate.	
	e. Each landfill sitc shall have wells to check for groundwater contamination.	

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Permit Requirements for Industrial Waste Disposal Business

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Classification	Disposed Waste	Specifications
	f. Each landfill site shall display a sign at the gate that reads "Industrial Waste Landfill Site."	
Waste resins	1) Melting facility	
10	a. Capacity shall be 5 tons or more per day.	
9	b. The facility shall have a function to control melting temperature electrically.	
	2) The facility shall have an incineration and landfill facility equivalent to that of a waste oil disposal facility.	
Waste acids and alkalis	1) Neutralization facility	
	a. Capacity shall be 5 tons or more per day.	
	b. The facility shall be furnished with a chemical feed	

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Permit Requirements for Industrial Waste Disposal Business

	(Jaceification	Dismood Wooda	remit average conversion of annual name propose publicas
	Classification	Uisposed waste	opecifications
		controller for neutralization, mixing, and dewatering	
			· · · · · · · · · · · · · · · · · · ·
		waste oil disposal facility.	
110	General industrial waste dismosal business	Organics	1) Dewatering facility
)			a. Capacity shall be 10 tons or more per day.
			b. The facility shall have the capacity to reduce water content to 85% or less of original water content.
			c. The facility shall be built or paved of waterproof materials.
			2) The facility shall have an incineration facility equivalent to that of a waste oil disposal facility.

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Permit Requirements for Industrial Waste Disposal Business

ification Disposed Waste Specifications	3) Landfill facility	a. The area shall be 3300 m <sup>2</sup> or more (Landfill capacity $10000 \text{ m}^3$ or more) (Excluded are the cases when landfill is	contracted with an industrial waste landfill contractor, or when the right is obtained to use public disposal landfill facilities, pursuant to Article	<ul> <li>b. Each landfill site shall be equipped with a waste spreader, compaction and cover equipment, and washing equipment for waste transportation vehicles.</li> </ul>	<ul> <li>c. Each landfill site shall have the necessary provisions to prevent pollution of public watershed or groundwater.</li> </ul>
Classification			111		

d. Each landfill site shall have

a system to prevent leachate soil penetration and to treat collected leachate.

Table 7 (Cont'd)	Permit Requirements for Industrial Waste Disposal Business	Specifications	e. Each landfill site shall have wells to check for groundwater contamination.	f. Each landfill site shall display a sign at the gate that reads "Industrial Waste Landfill Site."		<ol> <li>Landfill facility</li> <li>Landfill area shall be 3300</li> <li>m<sup>2</sup> or more (landfill capacity of 10,000 m<sup>3</sup> or more).</li> </ol>	b. Each landfill site shall be equipped with a waste spreader, compaction and cover equipment, and washing equipment for waste transportation vehicles.
Table '	Permit Requirements for Inc	Disposed Waste			Inorganic wastes shall require a landfill facility equivalent to one for organic wastes.	General industrial waste (Included are wastes generated after treatment in accordance with waste oils, waste resins, and waste acids and alkalis treatment standards)	
		Classification			Inorganics	Industrial waste landfill business	

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# Permit Requirements for Industrial Waste Disposal Business

Classification	Disposed Waste	Specifications
		c. Each landfill site shall have
		the necessary provisions to
		prevent pollution of public
		watershed or groundwater
		d. Each landfill site shall have
		a system to prevent leachate
		soil penetration and to treat
		collected leachate.
		e. Each landfill site shall have
		wells to check for groundwater
		contamination.
		f. Each landfill site shall
		display a sign at the gate that
		reads: "General Industriat Waste I andfill Site "
	Special hazardous industrial	1) Landfill facility
	wastes	
		a. Landfill area shall be 3300 m <sup>2</sup> or more (Landfill capacity 10000 m <sup>3</sup> or more).

b. Each landfill site shall be equipped with a waste spreader, compaction and cover equipment, and washing

# Permit Requirements for Industrial Waste Disposal Business

Classification	Disposed Waste	Specifications
		equipment for waste transportation vehicles.
		<ul> <li>c. Each landfill site shall have the necessary provisions to prevent pollution of public watershed or groundwater.</li> </ul>
114		d. Each landfill site shall have a system to prevent leachate soil penetration and to treat collected leachate.
		e. Each landfill site shall have wells to check for groundwater contamination.
		f. Each landfill site shall display a sign at the gate that reads: "Special Hazardous Industrial Waste Landfill Site."
		g. Each landfill site shall have a facility meeting the following requirements to bury those wastes that exceed the cement solidification standard after process:

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	Permit Requirements for Ind	Requirements for Industrial Waste Disposal Business
Classification	Disposed Waste	Specifications
116		<ul> <li>a) Outer walls shall be of concrete, 15 cm or more thick and 210 kg/cm<sup>2</sup> in compression strength, as measured by Korean Industrial Specification F-2405 (Compression strength for concrete), or the equivalent.</li> <li>b) Each partition shall be 50 m<sup>2</sup> or less in area and 250 m<sup>3</sup> or less in area and 250 m<sup>3</sup> or less in capacity. The inner wall shall be of concrete, 10 cm or more thick and of the same compression strength as a) or the equivalent.</li> <li>2) Each facility shall be for furnished with a scale to weigh wastes of more than 8 tons.</li> </ul>
Notes: 1. Disposal capacity of each facility o	if each facility or equipment shall be est	r equipment shall be estimated based on 8 hours operation per day.
2. If one facility or equipmen	t has two or more functions, it will be r	2. If one facility or equipment has two or more functions, it will be regarded as having two or more facilities or equipment.
3. Anyone applying for two or more permits requirements for each permit.		for industrial waste disposal business shall not be required to duplicate the individual facility

115

## Permit Requirements for Industrial Waste Disposal Business Table 7 (Cont'd)

Notes (Cont'd):

- 4. A qualified institution shall test each of the following items:
  - 1) Capacity of incineration facility
- Capacity of destruction facility
   Capacity of oil and water separation facility
- 5. Qualified institutions that can conduct performance tests for the items listed in No. 4 are:

- The Korean Mechanical Institute
   The Korean Energy Institute
   The Korean Energy and Natural Resources Institute
   The Energy Management Corporation.

116

- 6. A Gas Chromatograph (GC) (with ECD) shall be certified by a document showing the operational conditions, effective period, and other requirements that verify the soundness of the instrument.
- 7. Anyone using the landfill facility of another shall attach the document showing the right of use for that facility, conditions and period of use.

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## Table 8

## Checklist for Industrial Waste Disposal Facilities (Related to Article 56)

Facility	Checklist	
Incineration facility (high temperature destruction facility)	Appropriateness of type and quantity of the wastes incinerated	
	Amount of air supply and excess air ratio	
	Temperature of the combustion chamber and the exit	
	Operating conditions of the pollution control equipment	
	Compliance with the discharge permit of stack-discharged contaminants	
	Operating conditions of auxiliary equipment	
Destruction facility	Appropriateness of type and quantity of the processed wastes	
	Quantity of treatment chemicals injected	
	рН	
	Emission of toxic gas or odors	
Melting facility	Melting temperature	
	Emission of toxic gas or odors	
Neutralization facility	Appropriateness of type and quantity of the wastes processed	

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## Table 8 (Con't)

	(Related to the Article 56)	<u></u>
Facility	Checklist	
	Quantity of neutralizing	—
	chemicals injected	
	Mixing conditions	
	рН	
Oil and water separation facility	Leakage of waste oils	
	Oil content in the separated water phase	
	Spill prevention equipment for waste oils	
Cement solidification facility	Mixer operating conditions	
	Mixing ratios (cement, water, and substrate)	
	Compression mold operating conditions	
	Compression strength	
	Curing conditions	
Landfill	Cover conditions	
	Effluent quality	
	Emission of gas or odors	
	Groundwater contamination	
	Operating conditions of leachate treatment equipment	

## Checklist for Industrial Waste Disposal Facilities (Related to the Article 56)

## Table 9

## Standards for Administrative Measures (Related to Article 61)

## 1. General standards

only one of them shall apply. The same applies hereafter.) When the two or more measures apply to the same suspension of business, half of 1) When there are two or more violations, the administrative measure shall follow the heavier one (When two heavier measures are the same, the heavier measure can be added to the lightest measure but shall not exceed the total of the two measures.

2) Administrative measures that depend on frequency of violation shall apply to violations of the same type that have occurred within 1 year of each other. However, excluded are the cases included in paragraphs (1)a. and (2)c. and section 2. "Individual Standards."

## **2. Individual Standards**

119

1) Administrative measures governing general waste disposal businessmen:

Violations	Applying Law	First	Second	Third	Fourth
<ul> <li>a. Anyone who fails to start a business within 1 year after gaining permission or suspends the business for more than</li> <li>1 year without justifiable reason</li> </ul>	Article 13-1.3) of the Law	Revocation of permit			·
<ul> <li>b. Anyone who cannot meet the permit standards specified in Article</li> <li>11-1</li> </ul>	Апісle 13-1.4)				

## Standards for Administrative Measures (Related to the Article 61)

Violations	Applying Law	First	Second	Third	Fourth
a) One item fails to meet the standard by less than 1/3		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Revocation of permit
b) One item fails to meet the standard by at least 1/3 but less than 2/3		Order of correction	Suspension of business 10 days	Suspension of business 2 months	Revocation of permit
c) One item fails to meet the standard by 2/3 or more		Order of correction	Suspension of business 15 days	Suspension of business 3 months	Revocation of permit
c. Anyone who violates the stipulations of Article 6-1	Article 13-1.5) of the Law	Suspension of business 3 months	Suspension of business 6 months	Revocation of permit	
d. Anyone who violates the Law or any orders pursuant to this Law.	Апісle 13-1.6)				
a) Violation of night soil treatment standards and methods					
(1) Collection and transportation standards		Order of correction	Suspension of business 15 days	Suspenion of business 3 months	Revocation of permit

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## Standards for Administrative Measures (Related to the Article 61)

Violations	Applying Law	First	Second	Third	Fourth
(2) Treatment standards		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Suspension of business 2 months
b) Violation of refuse disposal standards and methods					
(1) Collection, transportation standards		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Suspension of business 2 months
(2) Treatment standards (Limited to night soil treatment and refuse disposal businessmen)		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Suspension of business 2 months
e. Violation of Article 28 of the Law (Education of waste disposal managers)	Article 13-1.6)	Order of correction	Suspension of business 15 days	Suspension of business 3 months	Suspension of business 6 months
f. Violation of Article 29 of the Law (Recording and record keeping)	Article 13-1.6)	Suspension of business 15 days	Suspension of business 1 month	Suspension of business 3 months	Suspension of business 6 months
g. Violation of Article 32 of the Law (Order of measures concerning waste disposal)	Апісle 13-1.6)				

## Standards for Administrative Measures (Related to the Article 61)

Violations	Applying Law	First	Second	Third	Fourth
a) Removal order of illegally dumped refuse		Suspension of business 3 months	Suspension of business 6 months	Revocation of permit	
b) Removal order of illegally dumped excreta		Suspension of business 3 months	Suspension of business 6 months	Revocation of permit	
h. Violation of operation and maintenance standards for night soil and refuse disposal facilities, pursuant to Article 14-2 of the Law	Article 14-4 of the Law				
a) Night soil treatment facility		Order of correction	Suspension of facility use 5 days	Suspension of facility use 15 days	Suspension of facility use 1 month
b) Refuse disposal facility		Order of correction	Suspension of facility use 5 days	Suspension of facility use 15 days	Suspension of facility use 1 month

2) Administrative measures governing design/ construction businessmen of night soil treatment facilities, refuse disposal facility, night soil treatment tank, livestock wastewater treatment facility, and manufacturer of night soil treatment tanks

	Standards for Ad (Related to	Standards for Administrative Measures (Related to the Article 61)	Ires		!
Violations	Applying Law	First	Second	Third	Fourth
<ul> <li>a. Anyone who fails to start a business within 1 year after gaining permission or suspends the business for more than</li> <li>1 year without justifiable reason</li> </ul>	Article 19-1.3) of the Law	Order of correction	Revocation of registration		
<ul> <li>b. Anyone who cannot meet the permit standards specified in Article</li> <li>17-3</li> </ul>	Апісle 19-1.4)				
a) One item fails to meet the standard by less than 1/3		Order of correction	Suspension of business 1 month	Suspension of business 3 months	Revocation of permit
b) One item fails to meet the standard by at least 1/3 but less than 2/3		Order of correctio:	Suspension of business 2 months	Suspension of business 4 months	Revocation of permit
c) One item fails to meet the standard by more than 2/3		Order c correction	Suspension of business 3 months	Suspension of business 6 months	Revocation of permit
c. Anyone who cannot meet the permit standards specified in Article 17-3	Апісlе 19-1.4)				
a) One item fails to meet the standard by less than 1/3		Order of correction	Suspension of busine°s 1 month	Suspension of business 3 month	Revocation of Permit

123

## Standards for Administrative Measures (Related to the Article 61)

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Violations	Applying Law	First	Second	Third	Fourth
b) One item fails to meet the standard by at least 1/3 but less than 2/3		Order of correction	Suspension of business 2 months	Suspension of business 4 months	Revocation of permit
c) One item fails to meet the standard by 2/3 or more		Order of correction	Suspension of business 3 months	Suspension of business 6 months	Revocation of permit
d. Anyone who cannot meet the permit standards specified in Article 18-1	Article 19-1.4)				
a) One item fails to meet the standard by less than 1/3		Order of correction	Suspension of business 1 month	Suspension of business 3 months	Revocation of permit
b) One item fails to meet the standard by at least 1/3 but less than 2/3		Order of correction	Suspension of business 2 months	Suspension of business 4 months	Revocation of permit
c) One item fails to meet the standard by 2/3 or more		Order of correction	Suspension of business 3 months	Suspension of business 6 months	Revocation of permit
e. Anyone who lends his certificate of registration to another	Article 19-1.5)	Revocation of registration			

124

## Standards for Administrative Measures (Related to the Article 61)

Violations	Annlving Law	Kirct	Second	Third	Fourth
	and Guilfulder				
f. When D/C businessman does incomplete work	Article 19-1.6)				
a) Incomplete work pursuant to Article 17-3.4)		Suspension of business 3 months	Revocation of registration		
b) When a contractor assumes a contract, pursuant Article 17-3.4), and subcontracts the entire job to another		Suspension of business 3 months	Suspension of business 6 months	Revocation of registration	
g. Work does not meet standards for the night soil manufacturing pursuant to Article 18-3	Апісle 19-1.7)	Suspension of business 3 months	Suspension of business 6 months	Revocation of registration	
h. Violation of Article 28		Anticle 19-1.8)	Order of correction	Suspension of business 15 days	Suspension of business 3 monthsSuspension of business 6 months
3) Administrative measures coverning industrial waste disposal businessmen	ndustrial waste dismosal hu	sinessmen			

125

3) Administrative measures governing industrial waste disposal businessmen

a. Violation of Article 7

Article 24-4

## Standards for Administrative Measures (Related to the Article 61)

	Violations	Applying Law	First	Second	Third	Fourth
	a) Violation of storage standards		Order of correction	Suspension of business 1 month	Suspension of business 3 months	Revocation of permit
	b) Violation of collection/ transportation standards		Order of correction	Suspension of business 1 month	Suspension of business 3 months	Revocation of permit
126	<ul><li>c) Violation of disposal standards</li><li>(1) Special industrial wastes</li></ul>		Order of correction	Suspension of business 3 months	Revocation of permit	
	(2) General industrial wastes		Order of correction	Suspension of business 1 month	Suspension of business 3 months	Revocation of permit
	b. Anyone who fails to start a business within 1 year after gaining permission	Article 24-4 of the Law	Suspension of business 1 month	Revocation of permit		
	c. Anyone who suspends the business for more than 1 year without justifiable reason	Article 24-4 of the Law	Revocation of permit			

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## Standards for Administrative Measures (Related to the Article 61)

	Violations	Applying Law	First	Second	Third	Fourth
	<ul> <li>d. Anyone who cannot meet the permit standards specified in Article 24-1</li> </ul>	Article 24-4 of the Law				
	a) One item fails to meet the standard by less than 1/3		Order of correction	Suspension of business 1 month	Suspension of business 3 month	Revocation of permit
127	b) One item fails to meet the standard by at least 1/3 but less than 2/3		Suspension of business 1 month	Suspension of business 3 months	Revocation of permit	
	<ul><li>c) One item fails to meet the standard by 2/3 or more</li></ul>		Suspension of business 3 months	Revocation of permit		
	d) Anyone who violates the stipulations of Article 48-6	Article 24-4 of the Law	Order of correction	Suspension of business 1 month	Suspension of business 3 months	Revocation of permit
	e. Anyone who violates Article 32 of the Law	Article 24-4				
	a) General industrial wastes		Suspension of business 1 month	Suspension of business 2 months	Suspension of business 3 months	Revocation of permit

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## Standards for Administrative Measures (Related to the Article 61)

Violations	Applying Law	First	Second	Third	Fourth
(b) Special industrial wastes					
1) Waste oils		Suspension of business 2 months	Suspension of business 4 months	Revocation of permit	
(2) Waste synthetic resins		Suspension of business 1 month	Suspension of business 2 months	Suspension of business 3 months	Revocation of permit
(3) Special hazardous industrial wastes		Suspension of business 3 months	Suspension of business 6 months	Revocation of permit	
a) Violation of night soil treatment standards and methods					
(1) Collection and transportation standards		Order of correction	Suspension of business 15 days	Suspension of business 3 months	Revocation of permit
(2) Treatment standards		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Suspension of business 2 months

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## Standards for Administrative Measures (Related to the Article 61)

	(Kelate	(Kelated to the Article 61)			
Violations	Applying Law	First	Second	Third	Fourth
<ul><li>b) Violation of refuse disposal standards and methods</li></ul>					c
		Order of	Suspension of	Suspension of	Suspension of

standards and methods					
(1) Collection and transportation standards		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Suspension of business 2 months
(2) Treatment standards (Limited to night soil treatment and refuse disposal businessmen)		Order of correction	Suspension of business 5 days	Suspension of business 1 month	Suspension of business 2 months
g. Violation of Article 28 of the Law (Education of waste disposal managers)	Апісle 13-1.6)	Order of correction	Suspension of business 15 days	Suspension of business 3 months	Suspension of business 6 months
h. Violation of Article 29 of the Law (Recording and record keeping)	Апісle 13-1.6)	Suspension of business 15 days	Suspension of business 1 month	Suspension of business 3 months	Suspension of business 6 months
i. Violation of Article 32 of the Law (Order of measures concerning waste disposal)	Апісle 13-1.6)				
a) Removal order of illegally dumped refuse		Suspension of business 3 months	Suspension of business 6 months	Revocation of permit	

129

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## Standards for Administrative Measures (Related to the Article 61)

Violations	Applying Law	First	Second	Third	Fourth
b) Removal order of illegally dumped excreta		Suspension of business 3 months	Suspension of business 6 months	Revocation of permit	
j. Violation of operation and maintenance standards for night soil and refuse disposal facilities pursuant to Article 14-2 of the Law	Article 14-4 of the Law				
(a) Night soil treatment facility		Order of correction	Suspension of facility use 5 days	Suspension of facility use 15 days	Suspension of facility use 1 month
(b) Refuse disposal facility		Order of correction	Suspension of facility use 5 days	Suspension of facility use 15 days	Suspension of facility use 1 month

130

Table 10

## Fee for Permit or Registration (Related to Article 65)

Classification	New	Change
1. Permit for night soil collection and transportation business	20,000 won	10,000 won
2. Permit for refuse collection and transportation	20,000 won	10,000 won
3. Permit for night soil treatment	20,000 won	10,000 won
4. Permit for refuse disposal	20,000 won	10,000 won
5. Permit for night soil tank cleaning	20,000 won	10,000 won
6. Registration for night soil, refuse, and sewage treatment facility D/C business	40,000 won	20,000 won
7. Registration for night soil tank and livestock wastewater treatment facility D/C business	20,000 won	10,000 won
8. Registration for night soil treatment manufacturing business	40,000 won	20,000 won
9. Permit for industrial waste disposal business	40,000 won	20,000 won

131

## III PRESIDENTIAL DECREE TO IMPLEMENT THE WASTE MANAGEMENT LAW (PRESIDENTIAL DECREE NO. 12119)

### Article 1. (Purpose)

The purpose of this Presidential Decree is to stipulate the items delegated in and necessary for implementing the Waste Management Law.

## Article 2. (Areas Prohibited From Open Waste Dumping)

1. "Other areas or sites prescribed by the Presidential Decree" (in Article 6-1.2 of the Waste Management Law [hereafter referred to as "the Law"]) shall be defined as:

1) Coastal areas within 10,000 m of harbor regions, according to the Coastal and Harbor Law

2) Areas so designated and declared by the EA, through coordination with the National Fisheries Administration, to produce or preserve marine products

3) Areas such as roadside, railroad track beds, or resort areas so designated and declared by the Environment Administration, through coordination with the Minister of Construction or the Minister of Transportation

4) Designated cultural properties and corresponding protected areas, according to the Cultural Properties Protection Law

5) Areas so designated and declared by the Environment Administration, through coordination with the Minister of Agriculture and Fisheries, to preserve the quality of agricultural water.

### Article 3. (Those Responsible for Disposal of Their Own Refuse)

1. A "large volume waste generator," defined as any one who, as a result of his business activities in the specially clean areas (prescribed in Article 10-2 of the Law), produces more than 300 kg of refuse daily, is responsible for disposal of his own refuse.

2. Storage, transportation, and disposal of refuse, pursuant to Article 3-1, shall be regulated by MOHSA order.

Article 4. (Areas in Which Sewage Treatment Facilities Shall Be Constructed, etc.)

1. "Public residential areas or other areas stipulated in the Presidential Decree" (in Article 15-1 of the Law) shall include areas where public housing is constructed, according to the Housing Construction Promotion Law, and the specially clean areas, pursuant to the Articles 9-1 and 9-2 of the Law. However, excluded are those areas in which separate or combined sewer systems have been constructed within a final wastewater treatment plant service area, in accordance with the Sewer System Law, and areas which

the Environment Administration designates and declares, through coordination with the Ministry of Construction, as not requiring sewage treatment facilities.

2. "Buildings and other facilities larger than the sizes stipulated in the Presidential Decree" in Article 15-1 of the Law are those buildings with a total construction area of over  $1600 \text{ m}^2$ . Buildings of this size require flush toilets to be installed. In public housing construction areas that include more than two buildings, the total construction area shall be calculated as the sum of all the construction areas. However, parking garages and warehouses occupied by fewer than 50 person, and other buildings or facilities stipulated by the Environment Administration, are excluded.

### Article 5. (Buildings That Require Night Soil Treatment Tanks)

"Buildings and other facilities that require night soil treatment tanks," pursuant to the provision of Article 15-2 of the Law are those buildings, parks, squares, and public meeting places in which flush toilets have been installed or will be installed, or buildings and other facilities where combined sewer systems have been constructed and are served by a final treatment plant constructed in accordance with the Sewer System Law. However, excluded are buildings and other facilities in which sewage treatment facilities, in accordance with Article 15-1 of the Law, have been or are being constructed; buildings and other facilities where sewage flows into a combined sewer system) and are served by a final treatment plant constructed in accordance with the Sewer System Law; and areas  $\mathfrak{I}$  esignated and declared by the EA, through coordination with the Ministry of Construction, as not requiring sewage treatment facilities.

## Article 6. (Categories of Livestock Facilities That Require Livestock Wastewater Treatment Facilities)

The types and sizes of livestock facilities that require livestock wastewater treatment facilities, pursuant to the provision of Article 15-3, of the Law are given in Annex 1.

### Article 7. (Facilities in Which a Third Party May Perform the Inside Cleaning)

1. The size of scwage treatment facility and night soil treatment tank which the Mayor/County heads may clean using a third party, pursuant to Article 16-3 of the Law, shall be:

1) Any sewage treatment facility with a capacity of  $10 \text{ m}^3$  or more

2) Any night soil treatment tank with a capacity of  $10 \text{ m}^3$  or more.

## Article 8. (Coordination of Permits To Construct Industrial Waste Disposal Facilities)

Before the Environment Administration issues a permit to construct an industrial waste disposal facility, pursuant Article 26-2 of the Law, it shall seek out the opinion of the Mayor of special city of Seoul, Mayors of cities under direct control of the national government, or Mayors/County heads with appropriate area jurisdiction over the facilities to be constructed.

### Article 9. (Waste Disposal Facilities Requirement To Appoint a Technical Manager)

1. The following waste disposal facilities are required to appoint a technical manager, who will be in charge of technical aspects of the operation and maintenance of the waste disposal facilities, pursuant to Article 27-1 of the Law:

1) Any night soil treatment facility with a capacity of 100 kl/day or more

2) Any night soil treatment tank with a capacity of 250 m<sup>3</sup> or more

3) Any sewage treatment facility with a capacity of  $250 \text{ m}^3$  or more

4) Any sanitary landfill facility with a landfill area of  $50,000 \text{ m}^2$  or more, or refuse disposal facilities using incineration, recycling/separation, and compost, with a disposal capacity of 100 tons/day or more

5) Any industrial waste landfill facility with an area of  $3300 \text{ m}^2$  or more; any industrial waste disposal facility using incineration, decomposition, or neutralization, with a capacity of 5 tons/day or more; or any industrial waste disposal facility using a cement solidification method, with a capacity of 1 ton/day or more.

### Article 10. (Qualifications of Technical Manager)

1. A technical manager in charge of technical works for maintenance and operation of an industrial waste disposal facility, under Article 27 1 of the Law, must be:

1) For night soil treatment facilities or sewage treatment facilities: a civil engineer, an environmental engineer, or a chemical engineer

2) For night soil treatment tanks: anyone with high school diploma and at least 1 year of field experience in a related area, or anyone with a 2-year college degree in natural science or engineering

3) For refuse disposal facilities or industrial waste disposal facilities: a chemical engineer, a mechanical engineer, a civil engineer, or an environmental engineer.

### Article 11. (Contract of Consignment for Technical Management)

1. To be technically qualified to make consignment contacts for the technical management of waste disposal facilities, pursuant to the Article 27-1 of the Law, one must be:

1) For night soil treatment facilities: a designer or builder of such facilities

2) For night soil treatment tanks: a manufacturer, designer or builder of such tanks

3) For refuse disposal facilities: a designer or builder of such facilities

4) For sewage treatment facilities: a designer or builder of such facilities

5) For industrial waste disposal facilities: a designer or builder of such industrial waste disposal facilities

6) Anyone who is accredited and declared by the Environment Administration as having a capability equivalent to Numbers 1) through 5) of Article 11-1.

2. The following items shall be included in the contract of consignment, as prescribed in Article 11-1:

1) The checklists according to the types of waste disposal facilities stipulated by MOHSA order

2) The frequency or methods for technical management.

### Article 12. (Personnel Requiring Waste Disposal Training)

1. Personnel requiring training to improve their qualifications, as stipulated in Article 28-1 of the Law, are:

1) Anyone who has obtained a permit of domestic waste disposal business, pursuant to Article 11-2 of the Law, and anyone in charge of technical works for waste disposal (hereafter referred to as "technical personnel")

2) Any technical personnel employed by a businessman or anyone who disposes of industrial waste by himself, pursuant Article 23-1 of the Law (including a businessman who is also a technical personnel)

3) Technical personnel employed by anyone who disposes of industrial waste produced by others for the purpose of recycling and reuse, pursuant Article 23-2 of the Law (including an industrial waste disposal handler who is also a technical personnel)

4) Technical personnel employed by a builder or operator of public disposal facilities, pursuant to Article 23-3 of the Law (including a builder or operator of public disposal facilities who is also a technical personnel)

5) Anyone who has obtained a permit for an industrial waste disposal business, pursuant to Article 24-1 of the Law, and his technical personnel.

## Article 13. (Delegation of Authority)

1. Under the Article 41-1 of the Law, the EA shall delegate to the Mayor of special city of Seoul, Mayors of cities under direct control of the national government, and Governors (hereafter referred to as "Mayors/Governors"), the following authority:

1) To approve construction or modification of items of refuse landfill with an area of 50,000 m<sup>2</sup> or less, pursuant to Article 14-2 of the Law

2) To appoint a construction monitor, pursuant to Article 20-1 of the Law, in cases where a business registration for manufacturer of night soil treatment tanks or for a designer and builder of livestock wastewater treatment facilities (required by Article 17-4 of the Law) is canceled, or in cases where a business operation is suspended in accordance with Article 19-1 of the Law.

2. The EA shall delegate to the heads of the regional environmental agencies, pursuant to the provision of Article 41-1 of the Law, the following authority:

1) To order improvement or suspension of business operation of night soil treatment facilities and refuse disposal facilities, pursuant the Article 14-4 of the Law

2) To approve design and construction of night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, under the exclusion categories of Article 17-1 of the Law

3) To appoint a construction monitor, pursuant to Article 17-2 of the Law

4) To register and modify registered items for businesses that design and construct night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, pursuant to Article 17-3 of the Law

5) To order cancellation of registration or suspension of business operation, pursuant to the Article 19-1 of the Law, of a designer and builder of night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, pursuant the Article 17-3 of the Law

6) To appoint a construction monitor, under the Article 20-1 of the Law, when registration for a designer and builder of night soil treatment facilities, refuse disposal facilities, or sewage treatment facilities, is canceled, pursuant to the Article 17-3 of the Law, or when a business operation is suspended, pursuant the Article 19-1 of the Law

7) To grant permits for industrial waste disposal businesses, as stated in Article 24 of the Law

8) To approve construction, and to order improvement or suspension of operation of industrial waste disposal facilities, pursuant to Article 26-2 or  $2^{6}$  4 of the Law (Public disposal facilities, pursuant the Article 23-3, are excluded.)

9) To require reports and inspection, as stipulated in Article 31 of the Law

10) To order correctional measures to eliminate or prevent the hazards, pursuant the Article 32 of the Law

11) To grant hearings, pursuant to Article 33 of the Law

12) To impose and collect fines, pursuant the Article 46 of the Law.

### Article 14. (Imposition of Fines)

1. Before imposing a fine, pursuant to the stipulation of Article 46 of the Law, authorities must inspect and confirm the violation(s and notify the violator of the violation(s) and the amount of the fine(s) that may be levied.

2. When the EA, Mayors/Governors, or County heads intend to impose a fine, they shall give a violator no fewer than 10 days to file a rebuttal on the imposition by an oral or written statement. If no rebuttal is filed by the given date, submission to the fine will be assumed.

3. The EA, Mayors/Governors, or Mayors/County heads shall take into consideration the cause and the consequences of the violation in determining the amount of the fine.

## Article 15. (Implementation Regulations)

Regulations for implementing this Presidential Decree shall be detailed by MOHSA order.

## ADDENDA TO THE PRESIDENTIAL DECREE

1. Enforcement Date: This Decree shall be implemented from April 1, 1987.

2. Abrogation of Presidential Decree of Garbage Disposal Law: The Presidential Decree of Garbage Disposal Law shall be abrogated.

3. Interim Measures Associated with the Abrogation of the Presidential Decree of Garbage Disposal Law: At the time of the enforcement of this Decree, when any other Decree addresses the stipulations of the Presidential Decree or the regulation of deleted Garbage Disposal Law, the articles corresponding to the intent of the deleted Decree and Regulation will be used.

4. Interim Measures for Construction of Sewage Treatment Facilities: Buildings or other facilities in which either sewage treatment facilities or night soil treatment tanks are under construction, pursuant to Article 5 of the Garbage Disposal Law at the time of enforcement of this Decree, may ignore the requirements, pursuant to Article 5 of this Decree, and be constructed in accordance with the deleted requirements.

## ANNEX TO THE PRESIDENTIAL DECREE (cf. Article 6)

### Allowed Area Within Specially Allowed Area\* **Facility Use** Clean Area More than $350 \text{ m}^2$ and More that $500 \text{ m}^2$ and For pigs less than 1200 m<sup>2</sup> less than 700 m<sup>2</sup> More than 700 $m^2$ and More than $350 \text{ m}^2$ and For cattle less than 1200 m<sup>2</sup> less than $600 \text{ m}^2$ More than 1000 m<sup>2</sup> and More than 500 $m^2$ and For horses less than 1200 m<sup>2</sup> less than $600 \text{ m}^2$ (including racetrack facilities) More than 1000 m<sup>2</sup> More than 500 m<sup>2</sup> For chickens and ducks

## Livestock Facilities in Which Livestock Wastewater Treatment Facilities Must Be Constructed

Note: Where two or more livestock facilities of the same type use the same wastewater treatment facility, the total area shall be the calculated as the sum of the areas of each facility. Where two or more livestock facilities of different types use the same wastewater facility, the following equation shall apply:

 $\frac{\text{first facility area}}{\text{allowed area}} + \frac{\text{second facility area}}{\text{allowed area}} + \ldots \ge 1$ 

When the sum is greater than one, the facility is required to construct a livestock wastewater treatment facility.

## IV KOREAN WASTE DISPOSAL FORMS

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(Form No. 1)

						Process Time
	Report on H	Recycle/Reus	se of Domestic	c Waste		Immediate
	1) Name of Business					
Reporter	2) Name (President 4) Address		3) Res: Registi	idence rationNo		······
	Busn. Est.				(Tel	. )
5) Recycle/Reuse Waste		Refuse:	Empty Both		_	
Masle			Waste Pape Vegetable	·	Naste Other	e Resins,
		Excreta:	Human,			
6) Method of Resource Recovery		Refuse:		ration, _		chanical Separation
7) Method of Recovered Resource Utilization			fuse,Sale	,Othe	er	·····
8) Daily Average Quantity		Refuse:		(Ko	g)	
	-	Excreta:		(K)	1)	
9)Daily Average Recovery or Production Quantity				<u> </u>		
10) Main (Collection						
I hereby re 10-4 & Reg	eport the Dor ulation 18-2	nestic Waste of the Wast	e Recycle/Reu te Management	se pursua Law.	ant t	o Article
				Date Reporte: To Mayo		• • County Heads
Exclosure:	Facility &	Equipment I	Detail 1 Copy	•		Fee
						None
						······································

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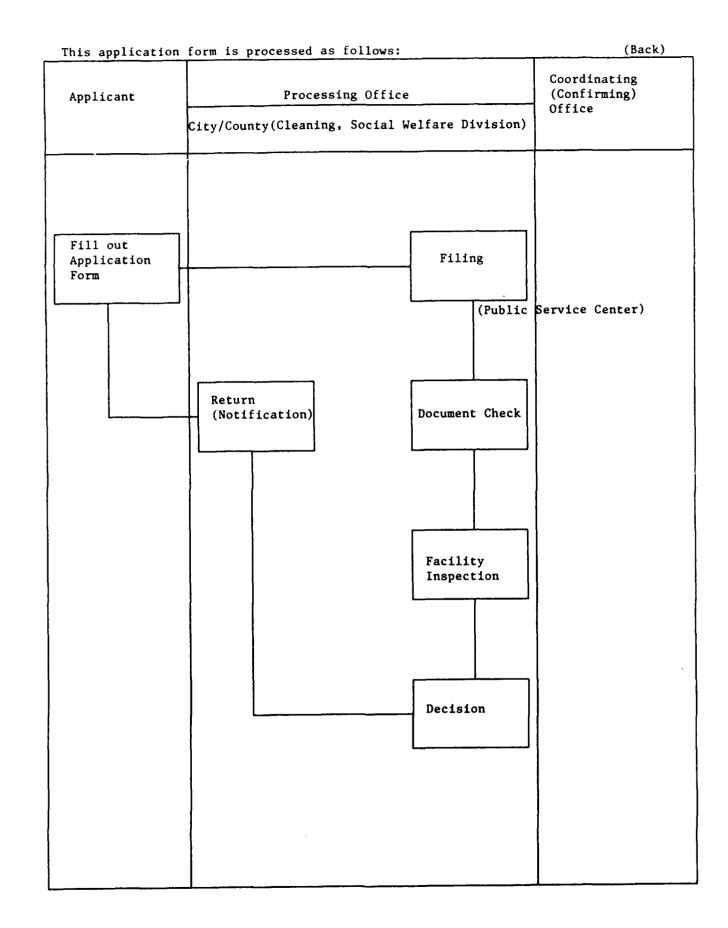
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(Form No. 2)

Certifi	cate of Report on Recycle/Reuse of Domestic Waste
1) Report No.	2) Date of Report
3) Name of Business	
4) Name (President)	5) Residence Registration No.
6) Location of Busn. Establishment	
7) Recycle/Reuse Waste	
8) Reutilization Method of Recovered Resource	
9) Main Source (Collection Place)	
I hereby issue thi of the Waste Managemen	s certificate pursuant to Article 10-4 & Regulation 18-3 nt Law.
	Date:
	Mayors/County Heads (Signature)

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(Front) (Form No. 3) Process Time ) of Domestic Waste Disposal Application for ( Permit 20 days Permit for change) Busn. (For Night Soil Treatment & Night Soil Collection/ Refuse Collection/ Refuse Disposal Transportation Business Transportation Business Business: 60 days) Refuse Disposal Business Night Soil Treatment Business Treatment Tank (Sewage Treatment Facility, Night Soil Treatment Tank, Livestock Wastewater Treatment Facility) Cleaning Business 1) Name of Business (Tel. ) Applicant 3) Residence 2) Name Registration No. (President) 4) Address (Tel. ) 5) Location of Business Establishment m<sup>2</sup>) (Area of Office 6) Location of Treatment Facility & Laboratory m<sup>2</sup>) (Area of Lab. I hereby apply for Domestic Waste Disposal Business[ Night Soil Collection/Trans-business))] pursuant to Article 11 & Regulation \_\_\_\_19 of Waste Management Law. 20 Date : Applicant: To Mayors/County Heads Enclosure (In case of change, applicable document only) Fee 1. Affidavit l copy. 2. Facility & Equipment Detail 1 copy. New 20,000 3. Current Technical Capabilities & Document showing won qualifications | copy. Change 10,000 won



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145

(Form No. 4) Permit No.

(Front)

refmit No.				
Certificat	e of Permit of a Busines	s of Domestic Waste Di	sposal	
l)Name of Business		2)Type of Business	<u> </u>	
3)Name(President)		4)Resident Registration No.		
5)Location of Business Est.		(Area	a of Office	m <sup>2</sup> )
6)Location of Disposal Facility & Laboratory		(Area	a of Lab.	m <sup>2</sup> )
7) Overview of Business				
8) Conditions for Permit				
	omestic Waste Disposal Bu 11 & Regulation 19 of th		7.	)
		Date: Mayors/Cour	ity Heads(Signat	ure)

[Changed	Items]
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(Back)

Date	Details	Confirm

## [Transactions]

Details	
	<u>,</u>
<u> </u>	·····
	<u> </u>
	Details

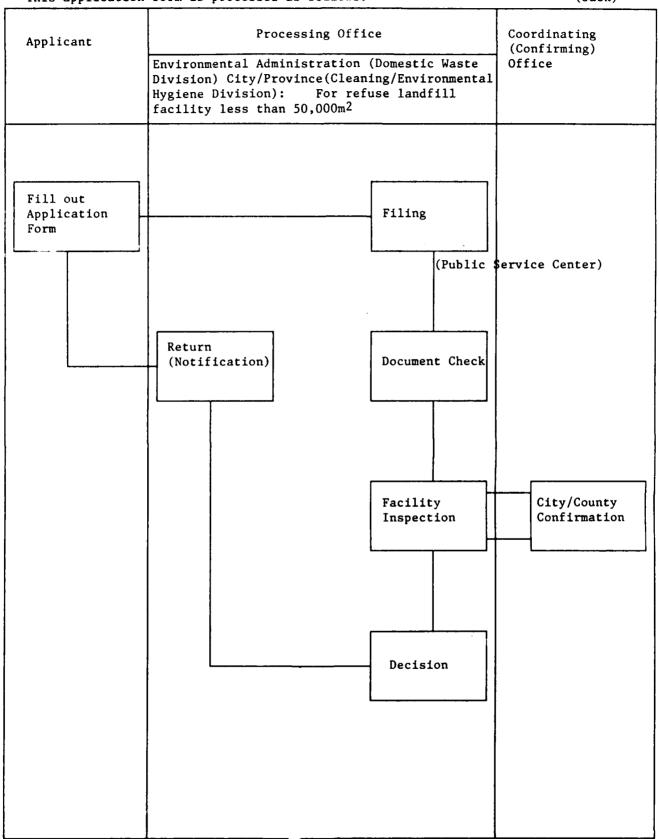
(Form No. 5)	)				(Front)	
					Process Time	
Application Treatment H	n for Approval c Facility	of (Construction o Modification	fNight Soil) Refuse		30 days	
Applicant	<ol> <li>Name of Business</li> <li>Name (President)</li> <li>Address</li> </ol>		3) Residence Registration No.	(Tel	•	
5) Location Business	n of Establishment		-	(Tel		,
Disposal Method	6) Night Soil		Fertilization Other()	8) D Cap (K1	isposal acity /day, n/day)	
	7) Refuse	Incineration Recycle by Separation Composting	_Landfill _Refused Drived _Fuel (RDA) _Other			
9) Location Facility	n of Disposal		10) Capital (thousand won)			
11) Area of	office (m <sup>2</sup> )		12) Area of Lab. m <sup>2</sup> )			٦
-	apply for a per Article 14-2 &	mit for (Night So Refuse) Regulation (24 o 25)	f the Waste Manager Date :	· _	Construction Modification) Law.	
	·	1	Applicant: Administrator of E Administration Mayors/Governors	nviro	nmental	
				y		
Enclosure:	Feasibility St	udy l copy			Fee	
					None	

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## This application form is processed as follows:

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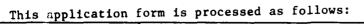
(Form No. 6)

Report	for Con	structd	n of (Severe Tree	tment Fac	{]{+v}		Process Time	
Report for Construction of (Sewage Treatment Facility) (Night Soil Treatment Tank) (Livestock Wastewater Treatment							3 days	
	Facility)							
Reporter	1) Nam	e		2) Resider Registra				
	3) Add	ress				(Tel.	)	
Location	4) Tot of Bui	al Area lding	m2	5) Usage Build:				
of Establish- ment	6) Loc	ation		7) No. of (for live facility of heads	estock			
Contractor for Construction	8) Nam Busin	ess		9) Regist Number				
(Planned)	of bus					(Tel.	)	
11) Starting of Construct				12) Plann of Comple				
13) Name of Manager				14) Resid Registrat				
Methods	5) Treatment Methods & Capacity Overview (K1/day)				city			
I hereby report Construction of (Sewage Treatment Facility) (Night Soil Treatment Tank) (Livestock Wastewater Treatment Facility) pursuant to Article 15 & Regulation 28 of the Waste Management Law								
					te : plicant:		• •	
To Mayors/County Heads								
Enclosure: Livestock Wa	-		ngs for Concerned Fac ment Facility, includ	-		of	Fee	
design drawings) 1 copy None						None		
Note) In case one installs Night Soil Treatment Tank manufactured by a manufacturer of the tank, write the manufacturer's business-name & registration no. in 15) & design capacity in 16).								

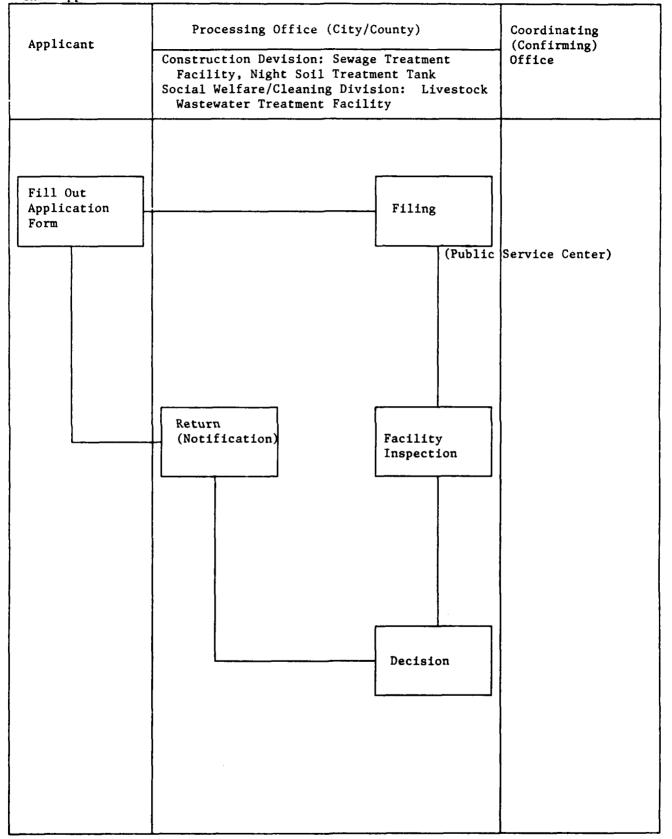
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(Form No. 7)				(	Front)
Applicati	Sewage Str Night Soil	ion of Completion eatment Facility .Treatment Tank Wastewater Treatme		for	Process Time 7 days
Applicant	1) Name		2) Residence Registration	n No.	
	2) Address				
Contractor of	4) Name of Business		5) Registratí Number	(Tel.	)
Construction	6) Location o Busn. Est.			(Tel.	)
7) Report Nu Construct			8) Treatment Methods & Capacity		
(Sewage T (Night So (Livestoc)	reatment Facil: il Treatment Ta k Wastewater Ti				
			Date Applic	: ant:	• •
			To Mayors/Count		
Enclosure:	None		Inspection Com	pleted	
			Date:	•	•
			Mayor	s/County	Heads(Signature)
Fee					
None					



(Back)



Management Card for Sewage Treatment Facility/Night Soil Treatment Tank/Livestock Wastewater Treatment Facility

City/County

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	Lard for Sewage reatment Facili	Treatment Faci ty	lity/N	light Soil '	Treatmen	it Tank/	Livestock	
	1) Address				·	(Те	1.	
Location of Facilities	2) Name			3) Residen Registrat	ce Ion No			
& Owner	4) Address			Registiat	ton No.	······	•	
	5) Name			6)_Reșiden	ce	(Te	·L•	
	7) Address	·		Registra	tion No.			
						r		
	8) Name			9) Residen Registrat				
	10) Name of Business			11) Regist: No.	ration			
Contractor of	12) Name (President			13) Resider Registrat	nce Ion`no.			
Construction	14) Location of Busn. Est.					(Te	1.	
15) Usage of	01 20011 2001			Total Area	of			
Building (Livestock) facility)				building (livestock	fac )			2
<u>   facilitý)</u> Number of							i	<u>m</u> 2)
Users/day	Classification	17) Total	18) <u>k</u>	ermanent esidence	19) Com	muting	20) Visiti	.ng
(for Sewage or Night Soil Treatment fac	21) Design						 	
Iteacmente Ide	22) Actual					<u> </u>		
No. of heads by animal	Classification	a 23) Pig 24)		Cow 25) Horse		se	26)Chicke	n (Duci
type(for	27) Design							
livestock wastewater	28) Actual							
treatment fac					l			
29) Completi	on date of		-	30) Date (	of		L	
Construc				Comple Inspec	etion			
		······		32) Reside				
31) Name of	Manager			Registra				
33) Overview				34) Treatm	nent			
of treatment				Capaci	Ĺty			
Method				(K1/da	ay)			
35) Capacity								
or capability of each								
or eacn structure or								
device								
					·			

Management Card for Sewage Treatment Facility/Night Soil Treatment Tank/Livestock

(Page No. 3)

1

		Check	ttems a	nd Action	ns			
Function Check	36) Date of Check							
	37) Comment							
	38) Inspector							
Cleaning	39) Date of Cleaning							
Status	40) Cleaner (Contractor)							
	41) Comment							
Effluent	42) Date of Quality Exam.							
Quality	43) Quality (BOD)	ppm	ppm	ppm	ррш	ppm	ppm	ppm
	44) Performing Institute							
	45) Date of Action Taken							
Actions	46) Details							
47) Other Comments								
Comments								

.

(Page No. 4)

Building (Facility) Details

Layout of Buildings & Site

(Form No.9)						(Front)
						Process Time
Application for Approval of Design/Construction of Night Soil Treatment Facility Refuse Disposal Facility						20 days
		tment Fa				
	1) Nam			······································		
Applicant	2) Nam			3) Residence		
		esident)		Registration No.		
	4) Add	ress			(Tel.	)
5) Location Establish					(Tel.	)
6) Treatment Method	Night	Soil	Oxidation,Dige	stion,Fertili	zation	,Other
	Refuse		Landfill,Incin	eration,	le by, ation	Composting Other
	Sewage			<b>•</b>	<sup>-</sup>	
7) Capacity (ton/day)	1			<u> </u>		
8) Location 6 Facility	of				(Tel.	)
			al of Design/Construc e 17-1 & Regulation 3			
				Date : Applicant:		
			To Region	al Aministrator o		ronment stration
Enclosure:	Refer t	o Back	Page.			Fee
					Γ	None
					L	<u> </u>

•

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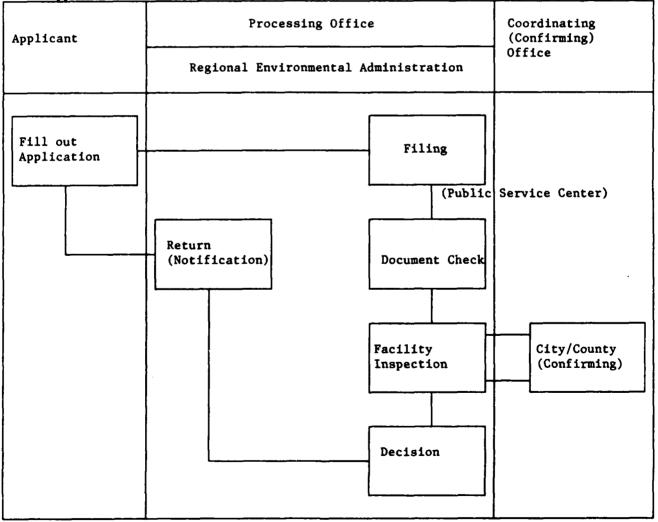
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(back)

[Enclosure]

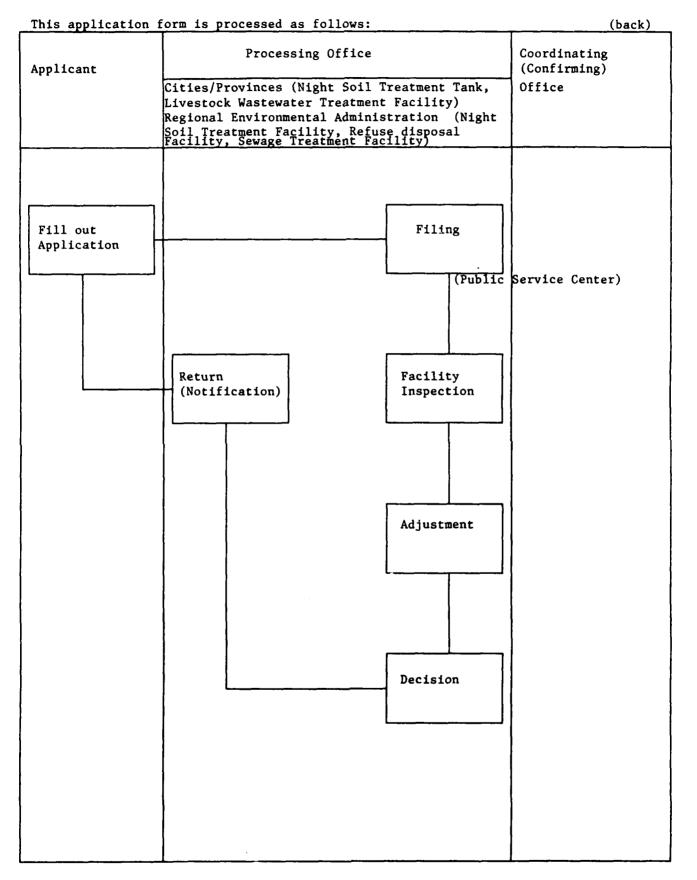
- 1. For Refuse Landfill Facilities
  - a. Explanation of an outline of Facility 1 copy.
  - b. Accounts of Expenses for Construction 1 copy.
  - c. Execution Design 1 copy.
  - d. Document to specify the location, area & capacity of Landfill site 1 copy.
  - e. Documents verifying ability of Design/Construction 1 copy.
- 2. For Incineration, Recovery and Composting facilities of Refuse, Night Soil Treatment Facilities and Sewage Treatment Facilities:
  - a. (a to c) of 1. above 1 copy each.
  - b. Documents to specify the location, capacity & disposal process of the facilities l copy.
  - c. Estimated Amount of Residues Resulting from their Processes and the Explanation of their Disposal Methods. 1 copy.
  - d. Documents verifying ability of Design/Construction 1 copy.



This application form is processed as follows:

(Form	No.	10)
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Applicatio	Process Time					
Constructl		20 days				
Azzlioopt	1) Name of Business					
Applicant	2) Name (President)	3) Residence Registration No.				
	4) Address		(Tel.	)		
5) Location Establish	ment	(0f	fice A	rea m <sup>2</sup> )		
6) Location			b. Are			
7) Type of D Construct	-	Night Soil Treatment FacilityR	efuse	Disposal Facility		
		T	ank	oil Treatment		
		Livestock Wastewater Treatment Fac	ility			
8) Capital ( 9) Reason fo		t	housan	d won		
Registra Modifica	ition ition					
Business of	Domestic Waste	egistration of Des odification of Registration) Disposal Facility pursuant to Article e Waste Management Law	-	d Construction or 17-4 &		
	_	Date: Applicant:	•	•		
	Тс	Mayors/Governors Regional Administrator of Environmen	tal Ad	ministration		
Enclosure (	In case of Modi	lfication, pertinent document only)		Fee		
2. Current		Details 1 copy ability & Document showing Qualificati	ons			
<ol> <li>copy.</li> <li>Document showing capital or property 1 copy.</li> <li>Copy of Certificate of Construction Business concerned (excluded are the cases of Night Soil Treatment Tank and Livestock Wastewater Design/Construction) 1 copy.</li> <li>Copy of Contract Document of Consignment Examination (In case of having a contract) 1 copy.</li> </ol>						
<ul> <li>* In case of Night Soil Treatment Tank/Livestock Wastewater Treatment Facility,</li> <li>Fee is half of above respectively.</li> </ul>						



#### 

(Form No. 11)

(Front)

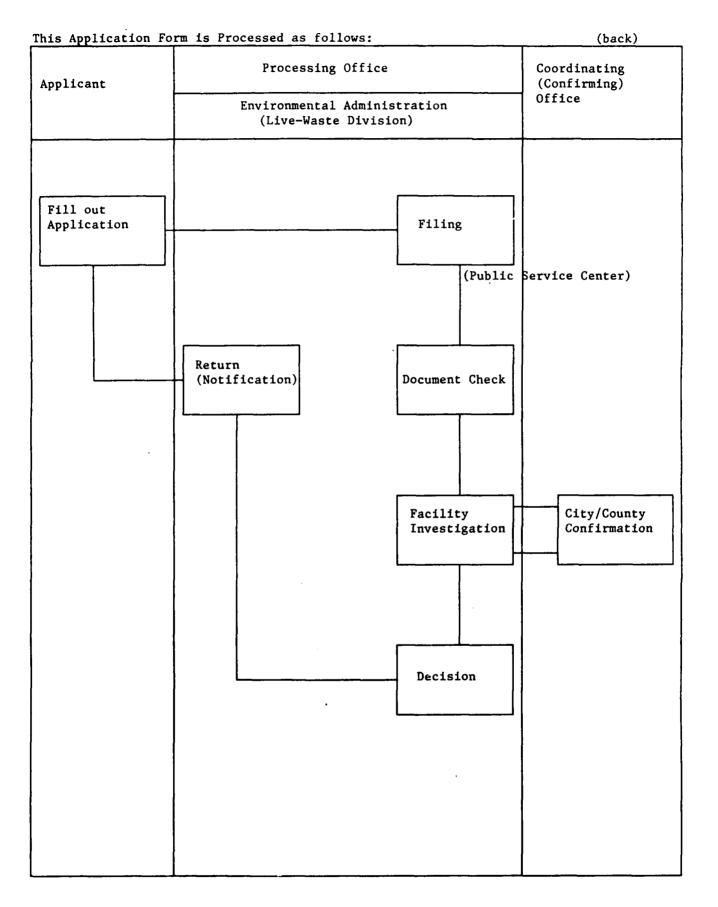
Registration No.	
Certificate of Registra	ation for Design/Construction Business of Domestic Waste Disposal Facility
l) Name of Business	2) Type of Business
3) Name (President)	4) Residence Registration No.
5) Location of Business Est.	
6) Location of Lab.	
7) Capital (Property)	thousand won
	registration for Design/Construction Business of pursuant to Article 17-3 or 17-4 & Regulation 36-3 of the
	Date: Mayors/Governors
	Regional Administrator of Environmental

[Changes Items]		(back)
Date	Details	Confirm
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

# [Transaction]

Date	Details
	•

(Form No. 1	12)	······				(Front	:)
Applicati	lon for ( Regi	stration	0	f Night		Proc	cess Time
	(Modi	fication of Registra ufacturing Business		r Might		20	) days
<u></u>	l) Name of Business						
Applicant	2) Name (President)		3) Reside Registrat				
	4) Address				(Tel.		)
5) Location Establish		_		· · · · · · · · · · · · · · · · · · ·	(Tel.		)
6) Capital (	Property)	thousand won	7) Area of F (m <sup>2</sup> )	actory	Area Site	of	Area of Floorage
8) Details o Facility	of Manufacturing	Use of PE(PVC)	<b>4</b>	Use (	of FRI	) 	
9) Technical Capabilit		Type Class No. of Employees					
-	g Business pursu	gistration dificationof Registra ant to Article 18-1	tion)	ion (3			nt Tanks Waste
			Dat Apj	te : plicant:	•		
		To Administrator	of Enviro	onmental	Admin	istra	tion
Enclosure (	in case of modif	ication, pertinent d	ocuments of	only)		Fe	e
2. Curren		)etails l copy. Ibility & Document sh	owing its				40,000 won
	ication l copy. nt Showing capit	al or property.				chan	ge 20,000 won



(Form No. 13)

Registration No.

Certificate of Regi	stration for Night Soil Treatment Tanks Manufacturing Business
l) Name of Business	
2) Name (President)	3) Residence Registration No.
4) Location of Business Est.	
5) Location of Factory	
6) Overview of Business	
7) Capital (Property)	thousand won
8) Registration Conditions	
	e Registration for Night Soil Treatment Tanks Manufacturing Article 18-1 & Regulation 38-3 of the Waste Management Law.
	Date:
	Administrator of Environmental Administration (Signature)

[Changed Items]		
Date	Details	Confirm
		, 

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# [Transactions]

Date	Details

	Repo	rt on Indus	trial	L Waste Ge	neration			-	<u> </u>	cess Tim	ie	
<u> </u>					···			<b>.</b>	Imm	nediate		
		1) Name c Busine	of ss			2) Type Busin						
Repor	ter	3) Name (Presi	dent)			4) Resid Registra	dence ation No.					
		4) Addres (Offic	s e)		(Tel.							
6) Ma	in Pro	ducts	7) Pr	oduction	(ton/yr)8) Main Material used 9)Consumption					otion <sup>(to</sup>	n/yr	
10) Ma	nufact	uring Proce	sses		·····							
ə		Classificat	ion	Generation Quantity		····	Disposal					
Waste	Туре			Recycle Tr		Treatment by owner	Treatmen					
	Indus Waste			Ger Quá	Reuse	by owner	Recycler	Disp Contr	osal actor	Public Disposal	Fac	
Industrial (ton/year)		Special Hazardous										
snp /uo	al	Waste Oil										
	ecial	Waste Synt Resins	hetic									
Details of Generation	Sp	Waste Acid Alkali	s									
ail era	ral	Organics										
Det Gen	eneral	Inorganics										
	n for	Report		Start	of Busines	s,Tern	nination o	f Bus	iness	. Date		
		eport on In Waste Mana			Generatio	on pursuant	to Artic	le 21	-2 &	Regulati	on	
	Date : Reporter:											
	To Mayors/Governors											
Enclo	sure			······································	<u></u>					····		
1.		acturing Pr					_		Fe	.e		
2. 3.	Indus	ls of estim trial waste sal Plan of	gene	ration 1	copy.		quantity	of	No	ne		
L				<u> </u>					<u>.                                    </u>			

[Fill-out Information]

- 1. One shall record the type of business pursuant to Korean Standards of Industrial Classification (small classification).
- 2. One shall draw the flowchart of the total process by each work unit covering from the storage & input of source materials to the output of the final product. One shall also indicate the point of input of source, sub-source materials, additives, and the point of generation of the Industrial Waste.
- 3. In the Details of estimate of the type, physical state, and quantity of Industrial Waste, one shall record the amount of the source, sub-source materials used, the name of product, production, and the type/physical state and quantity of the Industrial Waste estimation by each process.
- 4. In the Disposal Plan of Industrial Waste, one shall record the disposal plan in detail by each type of waste.

(Form No.	No. 15)																		r-
					L)	Management Type of Was		Record of te:		Industrial	Waste				(Unit:	: ton)	~		
							Disp	Disposal Q	Quantity	~								uoŗ	
Date Date	ə			Dis	Disposal	by Owner	ier			Disposal	þy	Consignment	nment					sice	
τοτεγήα (2	sew to	iereneð (f ittneug	Lajot (4	keuse 5 Recycle	-nicin eracion	7)Landfill self Coca fand Gov	dfill Local Govt site	( ) ( ) ( ) ( ) ( )	1630T (6	gense Recycle 10)	Issoqsid contracto .seq2 fo .seW .bn1	Issoquit Contract. of Gen. Ass. Jac. Mas.	Landfill Contract. Maste	Public Pisposal Facility	Quantity o Storage Name of	aangieno)	Tremmo)		I
											·								
[Fill o	l out info	information	ion]																

Management record shall be written by each subdivision according to the Regulation "Table 1". (ex.: cadnium or its compound, lubricating One shall record whenever the waste is generated or disposed of by each date.

One shall use the unit of weight ton. (For liquid, convert to weight by measuring the specific gravity) oils, waste ·····

In physical state of waste column, one shall classify wastes into solid, semi-solid, liquid, and record. papers) The management record of Waste shall be summarized at the end of each month and finally rolled up at the end

of the year.

(Form No.		<u> </u>			
Report on		se ecycle/Reuse)	of Industrial Waste		Process Time
					10 days
	1) Name of Business		2) Type of Business		
Reporter	3) Name (President)		4) Residence Registration No.		
	5) Location of Busn. Est.			(Tel.	)
6)Purpose & 1 of	1				
(Recyclo (Reuse)	e)				
7) Process (Recy (Reus	ycle)			<u> </u>	
I hereby		Recycle/Reuse Change of Recyc		f Indus	trial Waste
pursuant to			45-2 of the Waste Man 45-4)	agement	Law.
			Date : Applicant:		
			To Mayors/Governors		
Enclosure				·	
1. Docum	nent verifying (		ith the recycle/reuse		Fee
Admir		ant to the reg	tor of Environmental ulation 45-2 of the Wast	e [	None
2. Docum	nent of the cher	nical analysis	for the concerned waste waste only) l copy	_	

				Plan	for securi	ing Wa	aste				
Name of Gen. Busn.		Type of Business	; 10	0) Lo	cation of	Busin	ness	Тур	e of Waste	Estimated Quantity(t	:on/yr)
		Recycle	ton/y				Re	use (	ton/year)	4	
Type of Waste	Est quai	. Disp ntity	Name of pd. rec	yc re	antity of cyc. prod	Туре	e of Waste		reuse tity	Reuse Detai	.1s
		Recycl	e Facil	ity			Re	use F	acility		
Name of Facility		Usage		Capa	city(size)	Name Faci	e of llity	Üs	age	Capacity (size)	
	Dis	posal De	tails o	f Was	te Generat	ed af	iterRec	ycle,	Reuse,	(ton/year)	
Type of Waste		neration antity	Dispo		y Owner		cation of Disposal	by Co	nsignment	•	
		<u></u>	Dispose Owner	al by 	Disposa Method	.1	Recycler/ Reuser	8	isposal ontractor	Public Dis Facility	posal
Details	Re	easons f	or chang	ge		Befor	e Change		After	Change	
of Changes											
This app	lica	ation fo	rm is p		sed as fol				·		
Appli	cant	:	Specia City		rocessing N Dir iv) cit	Offic ectly ies/p	ce Cont. (EN prov. san.	mgmt div.	Coordinati Office	ing(Confirmi	ng)
Fill ou Applica	it itior				Filing						
					Check Confirmi	ng ir	n site				
					Return C of Repor	ertii t	icate				

(Form No. 17)

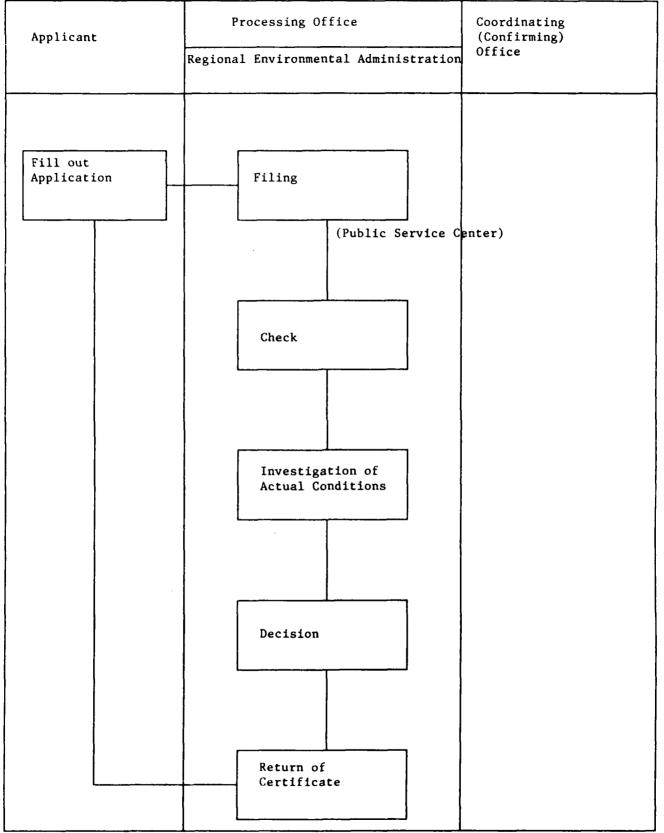
Certificate of Re	eport (Recycling of Industrial Waste (Reuse )
1) Report No.	2) Date of Report
3) Name of Business	J
4) Name(President)	5) Residence Registration No.
6) Location of Busn. Est.	
7) Purpose & Method of (Recycle) (Reuse)	
8) Type of Waste of (Recycle) (Reuse)	9) Name of Recycled Product 10) Details of Reuse
I hereby issue this Certificate the Waste Management Law.	pursuant to Article 23-2 & Regulation 45-3 of
	Date: Mayors/Governors (Signature)

[Changed	Items]
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Date	Details	Confirm
		<u>-</u>
		<u></u>
		<u></u> /_

Busines Permit	s for Modification	n of Indu	istrial Wa	ste Dis	posal	l Busi	ness	ĺ		s Time s (for for Mo s)	d.
pplicant	1) Name of Business			-1 -2 - D							
	2) Name (President)				eside strat	ion N	0.			<u></u>	
5) Location	4) Address (Office)						(Te	1.		<u>.</u>	)
Business	01						(Te	1.			)
6) Location Site	of Landfill				_	•	(Te	1.			)
7) Type of D Business	isposal			8) Reg Bus	ion c iness		· · · ·				
9) Type of W Concerned				·							
0) Expected of constr	starting date uction	· · · · · · · · · · · · · · · · · · ·	Capital (property			Desig of La Facil	ndfil	1 -	me of siness	Registr Number	at
<ol> <li>Expected date of c</li> </ol>	completing onstruction										
			Disposal	Facilit	у						
4) Name of Facility	15) Size Capacity	17) Loa	ction		18) Pre	Name Poll eventi	of ution ng Fa	с.	19) Si Cap	ze acity	
Details R	eason for change	 e	Befor	e chang	 e		A	fte	r chang	e	
of Change								* -			
_		for Modi 24-1 &	Regulation	n 48-2	of th	ne Was D		nag	: .		
Enclosure 1. Disposa	1 Plan for each	of the W	aste Conce	erned 1	CODV	7.			Fee	<u></u>	
2. Plan fo	r Facility & Equ y) 1 copy						size	,	None		

5. Reason for change (for change) 1 copy/



## This application form is processed as follows:

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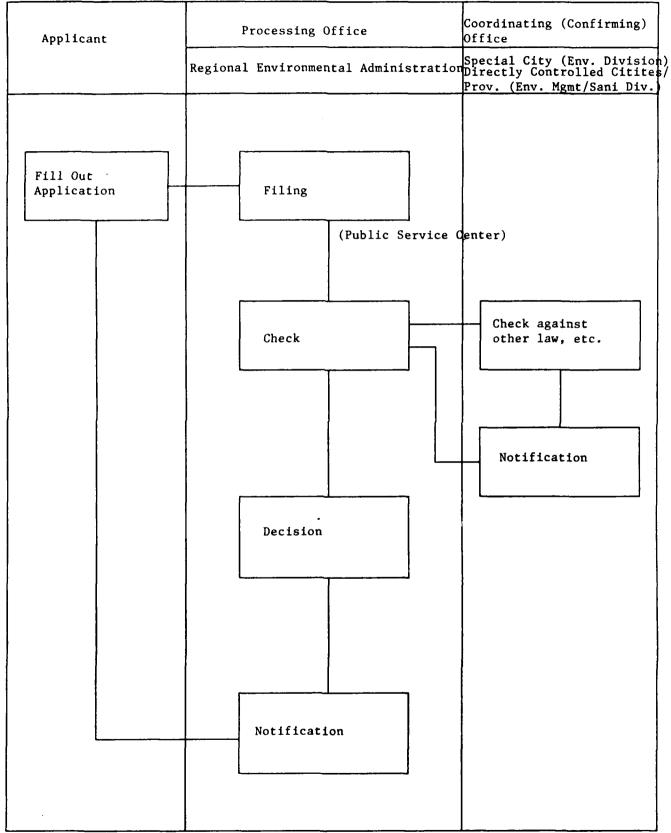
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(Form No	. 1	9)
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Applicat Business			t t for M		of I ication		stria]	L Was	ste Di	sposa	1		ss Ti days	me
Applicatio	on –	<ol> <li>Name of Business</li> <li>Name (President)</li> </ol>				t	or Bu	usn. sider	F Notf Plan nce tion N	Арр			<u>.</u>	
6) Locatio	on of	5) Address (Office) Business						- <u>-</u>		(Te (Te				)
7) Locatio Facilit 8) Type of Busines	ty E Dis	landfill sposal				9)	Regio Busir		E	(Te				)
10) Type ( Concer 11) Start: Constr	rned ing D	ate of	Capita (Prope			d	Constr of lar Facili	ndfi:			1	me of siness	Regis Numb	tration er
15) Name ( Facili		l6) Size (capacity)	17)	Tre Loca	atment i tion	Faci	llity		Name			19) Siz (Capa	e city)	
Details	Rea	son for chang	e		Before	cha	inge			Af	ter	change		
Change														
pursuant t To Regiona	to Ar al Ad	oly for (Pe (P ticle 24-1 & 1 ministrator o ase of Modifie	ermit f Regulat f Env.	ion Admi	odifica: (48-4 (49-1 nistrat	itor 4 of 2) ion	i) the	Wast Da Al	te Man te plica	ageme :		Busine	SS	
<ol> <li>Facilit</li> <li>Process</li> <li>Document</li> <li>Drawing section</li> </ol>	ty & s sho nt ve gs of n, el	Equipment Det eme of each we rifying current landfill fac evation, etc) Plan of Dispos	ails l aste co nt tech ility(] l copy	copy oncer inica ayou	ned l co l capab: t of fac	opy. ilit cili	ylc ty,π	copy. Main	plan,		s	Fee New 40, chg 20, copy.		

6. Document verifying capital or property 1 copy.



## This application form is processed as follows:

(Form No. 20) Permit No.

	Ce	rtific	ate of Permi	t for Industrial Wa	ste Disposal Business		
l) Nam Bus	e of iness						
2) Name (President) 3) Residence Registration No.							
4) Loc Off	ation o ice	f					
	ation o iness	f					
		pe of l siness	Disposal		7) Capital (Property)		
		pe of N ncerne			<u> </u>		
Items		9) Nai Fa	ne of cility	10) Size (Capacity)	11) Location		
Permit Items	Facility		cineration cility	ton/day			
I	Disposal F		composition cility	ton/ <sub>day</sub>			
	Disp	La Si	ndfill te	m2			
12) Re	gion of	Busin	288				
13) Pe	rmit Co	nditio	ns		· · · · · · · · · · · · · · · · · · ·		
				l Waste Disposal Bu Management Law.	siness pursuant to Article 24-1		
					Date:		
			Regional Ad	iministrator of Env	ironmental Administration (Signature)		
					· · · · · · · · · · · · · · · · · · ·		

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[Changed	Items]
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Date	Details	Confirm
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# [Transactions]

Date	Details

(Form No. 21)

Report	on Modification	n of I	ndustrial Waste	Disp	osal Business		Process Time		
							2 days		
	l) Name of Business			2) P	ermit No.		L		
Reporter	3) Name (President								
	5) Address (Office)				(	(Tel.	)		
6) Location	of Business					Tel.	)		
7) Location Facility	of Landfill	· · · · · · · · · · · ·		<u>.                                    </u>		Tel.			
8) Type of D Business	isposal	- · ·			9) Type of Waste Concer	ned			
10) Details of Charge	Date of Char	ige			Reason				
	В	efore	change		Aft	er Cl	Change		
						<u> </u>			
			n of Industrial f the Waste Man			ines	s pursuant to		
	To Regional	Admin	istrator of Env:	I	Date : Reporter: ental Administ	rati	on		
	ent verifying t		ange l copy. rrent technical	canal	aility &		Fee		
Quali l cop	fication (In ca y.	ise of	change in techn hange in name of	nical	capability)		None		

(Form No. 22)

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Process Time										
Application	Application for Reissue of Certificate of Permit for Industrial Waste Disposal Business									
Applicant	l) Name of Business		2) Permit Nc.							
	3) Name (President)		4) Residence Registration No.							
	5) Address (Office)		. (	Tel.	)					
6) Type of Business	_		7) Type of Waste Concerned							
8) Reason f	or Reissue									
I hereby Business pu	apply for Reissu rsuant to Articl	e of Certificate of e 24-1 & Regulation	Permit for Industr 50 of the Waste Ma	ial W nagem	aste Disposal ent Law.					
			Date : . Applicant:	•						
	To Regional Ad	ministrator of Envi	ronmental Administr	ation						
Enclosure	of the report o	f the loss (In case	of loss) l copy		Fee					
	••									

(Form No. 23)

Pepart o	n ( Canaral I	ndustrial Waste Tr	ansportation	Process Time
Report of	(Special)	Museriai wasee ii		Immediate
				······································
Description	1) Name of Business			
Reporter	2) Name (President)		3) Residence Registration No.	
	3) Address			(Tel.
	5) Name of Generating Business		6) Location of Generating Business	
	7) Name of Disposal Business		8) Location of Disposal Business	
Report Details	9) Type of Waste			
	10) Expected Amt. of trans- portation (ton	)		
	<pre>11) Location   of Loading</pre>			_
	12)Expected Location of Transportation			
	13) Method of Transportation			
	14) Reason for Transportation			
	15) Expected Period of Transportation		•	
	16) Special Comment			
	Record of	17) Location of Transportation		
	Last Month (	18) Type of Waste		
		19) Amount of Transported (ton)		1
I hereby	report on (G (S	eneral Industria pecial)	l Waste Transportatio	on pursuant to
Article 25		-2 of the Waste Ma	Date : Applicant:	
Enclosure:	None		yors/Governors	Fee
				None

[Fill out Information]

- 1. When transporting the industrial Waste to other place rather than the place (or Location of Business) where generated, one shall submit the report by each expected location of transportation
- 2. The column for type of Industrial Waste shall be recorded according to the subdivided name and the physical state according to "Table 1" of the Regulation.

ex: Cadmium or its compound (Liquid Phase)

- 3. The reason for transportation should be recorded in detail. (Shall include the disposal plan after transportation)
- 4. For special comment, special attention or instructions during transporting & handling shall be recorded.
- 5. For the Transportation Record of Last Month, the transportation performed by each location of transportation of previous month shall be recorded. (In case of the special Industrial Waste, do not record)

(Form No. 24)

			Process Time
Report o	on Landfill of S	pecial Industrial Waste	Immediate
Reporter	l) Name of Business	2) Type of Business	
	3) Name (President)	4) Residence Registration No.	
	5) Address	/m	
Report	6) Expected Date of Landfill	(Te 7) Location of Landfill	)
Details	8)Classifi- cation of Landfill Site 10) Type of Waste	9) Name of Busn. of Landfill Site	
	11) Place of Loading		
	12) Estimated Amt. of Landfill (to		
	13) Treatment Method		•
		ill of Special Industrial Waste pursuant aste Management law.	to Article 25
		Date : . Reporter: To Mayors/Governors	•
Enclosure	e: None		Fee
			None

•

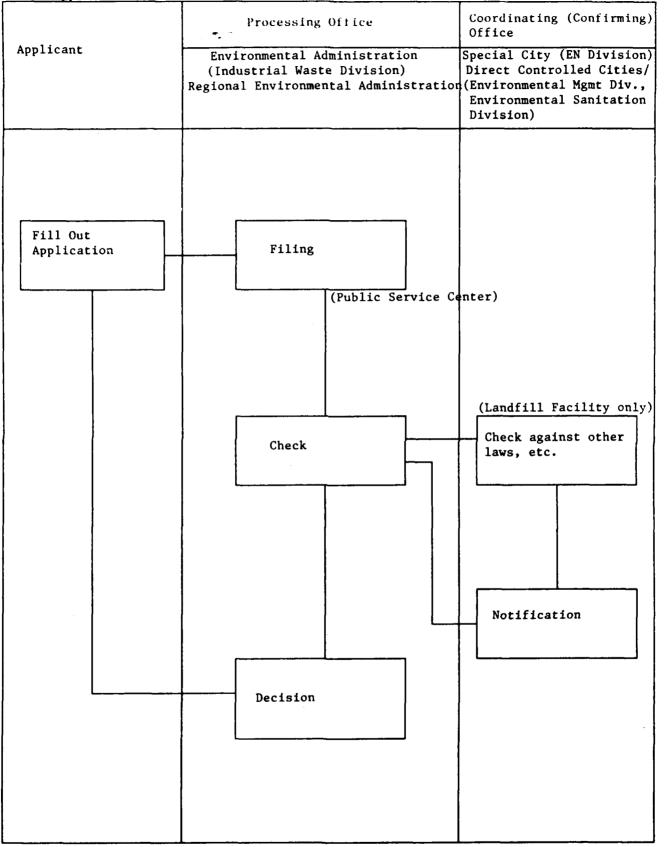
-

[Fill out Information]

- 1. Report on Landfill shall be submitted by himself who wants landfill everytime landfill is performed.
- For the classification of landfill sites, they shall be subdivided into "self owned landfill site," "Special (General) Industrial Waste Disposal Business Landfill Site", "Landfill Business Landfill site," "Local Government Landfill Site," or "Public Landfill Site".
- 3. For the type of waste, the explicit name & physical state shall be recorded.
- 4. For the Treatment Method before landfilling shall be recorded.

(Form No.	. 25)										
Applicati	ion for	(	Approv	al		01	F Con	structior	of		Process Time
Industria		$( \Box$	Approv	al of	Modificat ty		. oon	Stibetio	. 01		30 days
	1)		e of iness					Type of Business			
Applicant		Nam (Pre	e sident)					Residence stration			
		Add (Off	ress ice)							(Tel	. )
6) Locati Establ	lon of 1 Lishment		ness		. <u></u> <u></u>	<u>.</u>	₩ <b>₽</b>				
7) Expect of Cor	ed Stan		g Date	•	• •	8)	-	ected Com e of Cons	-		• • •
					Productio	on Deta	ils		-		
9) Name o Source	of Main Mater:		10) Qu (t	antity on/yea			ime o: coduct	f Main ts	1		uantity produced ton/year)
				Wast	e Generat	ion De	taile	s			
13) Type Waste		14)	Physic: State	al	15) Quan Gene	tity rated	(ton, yr)	16) Name Gene Proc	of ratir ess	g	17) Classification Produced (ton/year)
				 I	l Disposal :	Facili		L		I	<u>,,</u>
18) Name Facil		19)	Size (Capac:	Lty)	20) Type Conc	of Wa erned	ste	21) Expe of D (ton	cted ispos /year	Qty al	22) Name of Pollution Prevention Facili
				-							
Details	Reaso	on fo	or Chang	ge	Be	fore C	hange	e		Afte	r Change
of Change								<u>.</u>			
Disposal Waste Mar	Facilit	typu tlav	urusant	prova to Ar	l 1 of Modi ticle 26- 1 Adminis ironmenta	ficati 2 & Re	.on) gulat	tion ( <u> </u> Dat	53) e	( <u> </u>	rial Waste 54-2) of the 
l. Co	e opy of (	Certi	ificate	of Pe	rmit for	Genera	tion	Facility	puru		Fee
pe	rmitee	for	Generat	ion F	ronmental acility o aste conc	nly) l	copy	· ·	IOT		None
3, D1	sposal	plar	n for th	ne was	te fenera	ted af	ter t	reatment			l_facility, plan :

landfill facility construction 1 copy.5. Design Drawings & Explanations Disposal Facility (In case of landfill facility, etc.



## This application form is processed as follows:

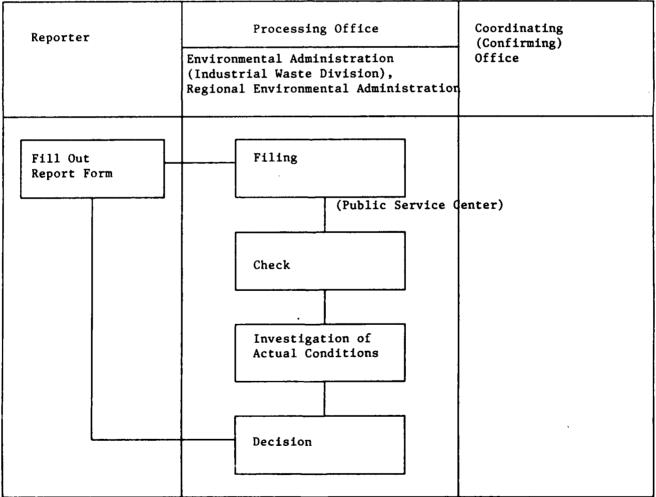
					Process Time				
Report or	n Operation of In	dustrial Waste L	lisposal Facility	ÿ	15 days				
Reporter	l) Name of Business	· ·,	2) Date of Facility Ap	oproval					
	3) Name (President)		4) Residence Registration						
	5) Location of Busn. Estab.				)				
6) Starting Construc		• • •	7) Complet Date of Construc						
		Wastes fo	r Disposal						
8) Type		9) Physical S	tate		ated Quantity sposal (ton/yr)				
	Disposal Facility								
11) Name of	Facility 12) Di (te	sposal Capacity on/day)	13) Estimated ( of Disposal (ton/year)		Name of Pollution enting Facility				
	report on Opera 2 & Regulation 5			al Facility	pursuant to				
	istrator of Envi: nal Administrato								
	refer to Back pa			· ••	Fee				
					None				

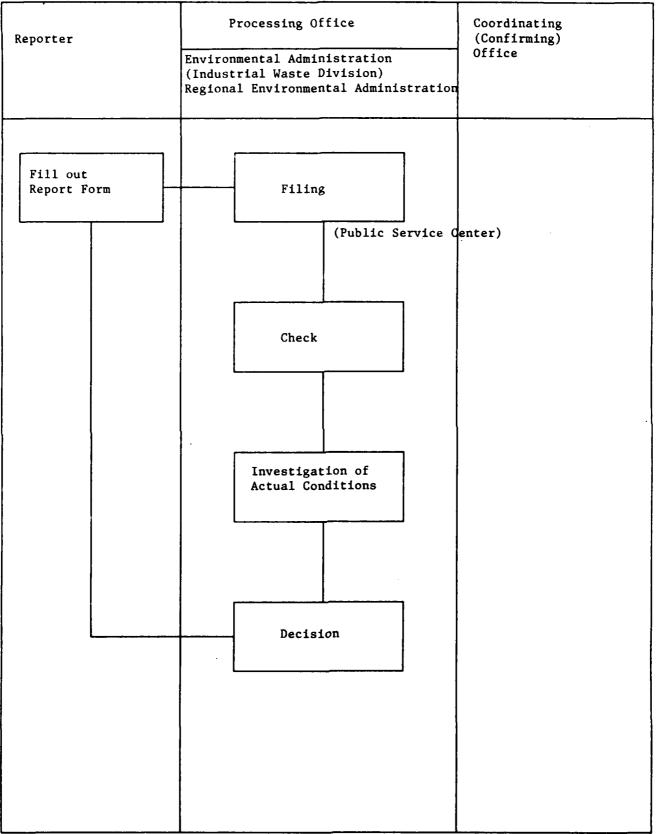
\_

## [Enclosure]

- 1. Certificate of Waste Generation Facility Construction & Performance Document of Quality Examination (pertinent cases only) 1 copy.
- 2. Plan for operation and Management of Disposal Facility 1 copy.
- 3. Document verifying the current technical personnel & qualifications (In case of Regulation 9 of the Waste Management Law only) 1 copy.

#### This report is processed as follows:





# This report form is processed as follows:

( F	orm	No.	27
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				Process Time
Report on	Operation of I	ndustrial Waste Landfill Facility		15 days
Reporter	l) Name of Business	2) Date of Lanfill Fac. Construction		
	3) Name (President)	4) Residence Registration No.		
	5) Address (Office)	6) Permit No. for Disposal Contractor		
Establis Location	of Business hment or of Business p. Contractor)		Tel.	)
8) Type of Business Concerne	& Wastes	9) Wastes for Landfill		
10) Locatio Facilit	n of Landfill y	11) Total permited Area for Landfill m2		
12) Complet Area (m		13) Completed Landfill Quantity		
Application	14) Area (m <sup>2</sup> )	15) Landfill Capacity (m <sup>3</sup> )		
Details	16) Period of Operation	17) Remaining Area (m <sup>2</sup> ) (11-12-13)		
	18) Facility Overview			
I hereby re Article 26-3	port on Operati & Regulation 5	ion of Industrial Waste Landfill Facility 55 of the Waste Management Law.	 y pu1	rsuant to
		Date : Reporter:	•	•
		Environmental Administration rator of Environmental Administration		
Enclosure				Fee
l. Detai 2. Plan	for operations	Facility 1 copy. and Management of Landfill Facility 1 co	opy.	None
			L	

Comment 0¢µвı 13) Excreta (kl/day) I) Return Fertili Sation I2) Disposal Details & Quantity cinet-cinet-ation 9)Class. for Re-cycle 01her 10) Teatment 10) Refuse (ton/day) Logbook for Domestic Waste Management -uI (8 Libnal (7 1sjoT(d cleaning business, cleaning detail Incineration location or (In case of 5) Turn-in Location) (Landfill location day) 4) Excreta Transportation (ton/ Quantity of Collectionday) 3) Refuse (ton/ Location (In Collecting region of cleaning? business, cleaning case of 5) ajad (1

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(Form No. 28)

Date [For Re						•	11 1 2 2 2	ALL NG								
			,	Ť	Logbook for Ind (Type of Waste:	Industi te:	LIAL W	aste na	Industrial Waste Management te: )	) (						
	Kecyc11ng/Keuse		businessman)											(Unit:	: ton)	
	2) Name of Consigned	<u>.</u>	pə:		General after l	ttion & Lispos Recycle/Reuse	Lispos /Reuse	Lisposal Details 2/Reuse	ails of	f Waste		generated		:۸	Decision	Ę
0	Business (collecting	ate ste	artrs Josíí	nze Kecy Brttt		bet	Treatment Owner	aent by		Treatment by Consignment	t by ent		۱۱) ۲۰	-5) ored (č-		
I (I	TOCALION	BW	იე	ło	γT (ð	λ) (Γ	(8) IsjoT Total	-puer (01 uoije 19úijo -ui (6	(11 111 -pue1 (01	Total Recyc/ Reuse	Cont. Disp []	Public Disp. Fac.	+8)-/) 20055 12) 05	7) 15 n0 (91		
[Fill ou 1. Mana 2. One 3. One 4. For	t info gement shall shall physic	rmation] : logbook shall be written by record whenever the waste is use the unit of weight, ton. :al state of waste, one shall	ll be v ver the of we: waste,	shall be written by lenever the waste is init of weight, ton. of waste, one shall	1	each subdivision according to the regulation "Table 1" (ex: generated or disposed of by each date. (For liquid, convert to weight by measuring the specific gra classify into solid, semi-solid, liquid phase and record.	livision acco l or disposed id, convert into solld,	iion accor disposed convert t solid, s	rding to the regulation "Tabl of by each date. to weight by measuring the sp semi-solid, liquid phase and	o the each d ht by lid, l	regula ate. measur iquid	ition " ing th phase	Table e spec and ree	rding to the regulation "Table 1" (ex: Cadmi of by each date. to weight by measuring the specific gravity. semi-solid, liquid phase and record.	Cadmiu compou rvity.	um or its und, Waste (papers, (lubricating
																oils)

(Form No.	30)												[	
			Logb( (Type	Logbook for Industrial (Type of Waste:	Indus ste:		Waste Mana	Management )						
(For Disposal	sal Businessman)	(1										(Unit: ton)		
1) Date 2) Name of bangiano Banaianeas	ustress (Location of Collection)	3) Physical State of Waste	4) Quantity Collected	S) Quantity Recycled/ Seused	6) Quantity Incinerated	7) Total	1192 (8 1111 1111 1111 1111 1111 1111 1111 1	9)Land fill site for Ind. site	e201(0 bn61 bn61 br21 br21 br21 br21 br21 br21 br21 br2	11) Public Linduf (11 Site	2) Quantity beroi2	Decision	noi	
[Fillout In	[Fillout Information]			1									]	

Management Logbook shall be written by each subdivision according to the regulation "Table 1" (ex: Cadmium or its compound, Waste papers, lubricating oil) **1**.

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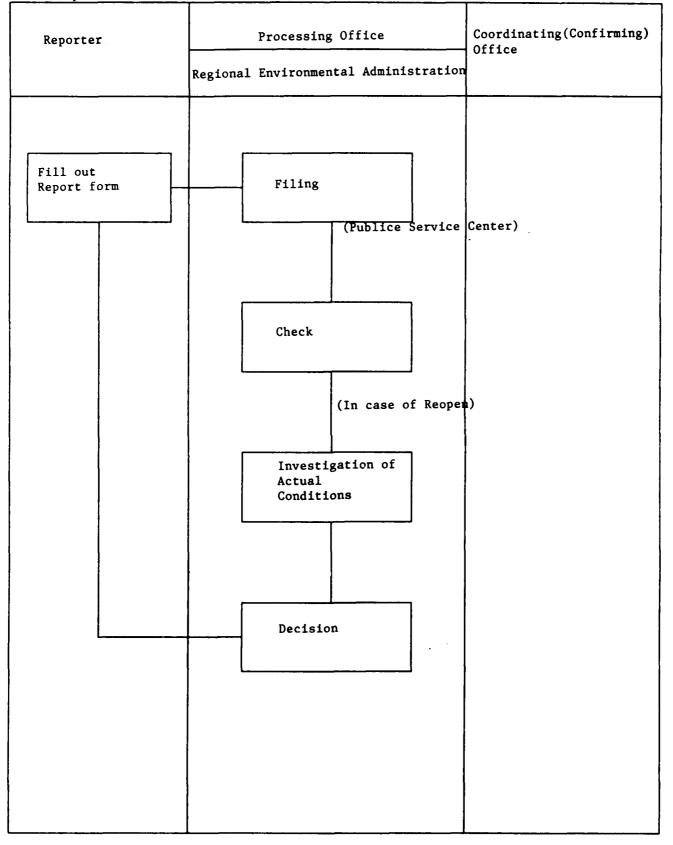
4°.

One shall record whenever the waste is generated or disposed of by each date. One shall use the unit of weight, ton. (For liquid, convert to weight by measuring the specific gravity. For physical state of waste, one shall classify into solid, semi-solid, liquid phase and record.

(Form No. 31)

Report on ( (	Suspension Termination Reopen	of Dor	mestic Waste 1	Disposal Business		Process Time		
Reporter	l) Name of Business							
	<ol> <li>2) Name (President)</li> <li>4) Address</li> </ol>			3) Residence Registration No.				
	4) Address			(	Tel.	)		
5) Location Establis	n of Business shment			(	Tel.	)		
6) Type of (registe	Permitted ered) Business			7) Permit Registration No.		<u>`</u>		
8) Date of	(Suspension (Termination (Reopen	•		9) Expected Date of Reopen (In case of suspension)				
10) Reason for (Suspension (Termination explicitly								
Article 30 To Admin Mayon Regio	(T (R & Regulation 59 nistrator of Env rs/Governors	ermina eopen 9 of ti vironme	tion he Waste Mana ental Adminis	Date Reporter	:	s pursuant to		
*Offices Fo -City/Cour -City/Prov Tank or I -Regional Treatment	or Report hty: Domestic M vince: Design/Co Livestock Waster Environmental A t Facility/Refus	Waste   onstrue Water ' Adminis se Disj	Disposal Busi citon Busines Treatment Fac straiton: De posal Facilit	ness s of Night Soil Trea	ly tment sines t Fac	s of Night Soil ility		

# This report form is processed as follows:



(Form No. 32)

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Report on ( (	Suspension Termination Reopen	of Industrial	Waste	Disposal Business	Sust	ocess Tim Dension Dination)		open
						ediate		days
Reporter	<ol> <li>Name of Business</li> <li>Name</li> </ol>		Bu	pe of siness rmitted 5) Resider	ace l	3) Perm Numb		
	<ul> <li>(President)</li> <li>6) Address</li> <li>(Office)</li> </ul>			Registrati Number	Lon .			
Facility 8) Waste fo	r				(Tel. (Tel.			) )
Disposal 9) Date of	//···		•	case of	oen (In	 -	•	
11) Reason Explici	(			suspens	310n			
-	(Te	spension of ) ermination copen n 59 of the Was		-	-	Business	purs	uant
To Regi	onal Administra	itor of Enviror	mental	Date Reporter Administra		•		
1. Certifi 2. Plan fo	Pertinent Docum cate of Permit r management of	(In case of Su Waste which i				ie Fe	e	
<ol> <li>Result</li> <li>l copy</li> <li>Documen</li> </ol>	ension/Terminat of Disposal Fac t verifying the e of Reopen) 1	ility Examinat			-	fication		
(In cas	e of Reopens f	сору						

(Form No. 33)				
	y Report on Recyc	ling/Reuse of Dom		)
Classification (	Code		Date	
& Document No.			Sender(Signature	
Receiver To Mayo	ors/County Heads		(Tel.	)
	1		· · · · · · · · · · · · · · · · · · ·	
1) Report No.		2	) Name of	
			Business	
3) Name		4	) Residence	
(President)		R	egistration No.	
5) Location of				
Business				1
			· -•	
	Pac	ycle/Reuse Detail	le	
	Rec	ycie/keuse becai.	15	
6) Main Source	7) Material for	8) Quantity of	9) Method of	0) Sum of Sales
(Collection	Recycle/	Recycle/	9) Method of Recovered Resource Utilizat. (Self use/ sale/	(In case of
Location)	Reuse	Reuse	(Self use/ sale/	Sale)
		(ton/year)	donation/ etc.)	
			] 1	
•				
			I	

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(Form No. 34) Summary Report of	Generatio	on and Dis	aposal of Ind	ustria	l Wast			)	
Classification Co & Document No. Receiver			,pobur or rid		Date	r(Signa	ature)	,	)
1) Name of Business		Name sident)		3)Typ Bus	e of iness				
4) Location of Business Establish-	<u>_</u>	c	5) Classifi- cation of Susiness	A	В	С	D	E	F
ment	(Tel.	-	Region	Resi- dent- ial	Comm- er- cial	Green Belt	Indus trial	(	Other
7) Permit Date of Generation Fac. Est.	8)0p	od per	() month	9) Nur of Employ		Total	Te	chnica pport	1
10) Name of main Products		Qty 12 products (year)	2) Name of ma used	in fue		Quant Used ton/yea		4) Yie (%)	1d
	T =	<b></b>	ess having Ap		for E				
15) Name of Facility		of Approv Establishm		e pacity	)		Quanti Dispos (ton/y	al	
Landfill F	lacility (Fo	or Busines	ss having App	roval	for Es	Ltablis	hment)		
19) Location	20) I A for E	Date of Approval Estab.	21) Approve Area fo Establishmen	r	2) Repo Area use	orted a for (m <sup>2</sup> )	23)	Capaci of Land (3)	ty df111

(Form No.	35)												
Summ Classifica & Document Receiver			lecyc1	ing/Re	use	of In	Date	e: der(Si	ste (Y .gnatur	•	)	)	
1) Name of Business			2) N (Pres	ame ident)					pe of siness				
4) Date of Report	•	•	f	laste or osal									<u>.</u>
6) Location of Business Establish-					tio	lassi n of iness	fica-	A Reg-	B Comm-	C	D	E	F
ment		(Tel	•	)	Reg			Reg- ional	er- cial	Green Belt	trial	Ind. Com- plex	other
8) Process Scheme of (Recycle (Reuse					• ••••••								
			D	etails	of	Recyc	le/Reu	ıse					
9) City/ 10 Province for Report	0) Date of Report	ll)Rep No.		2) Typ Waste Recycl Reuse	for	Prov	City/ vince Report		Date Repor	of 15) t	Report No.	16) of W Recy Reus	aste cle/
L		<u> </u>	Det	tails (	of Wa	ste (	Collec	tion			<u></u>	<u> </u>	
of Consign	8) Type of Waste	19) Qt (ton/		0) Con Ity/Pr f Cons usines	trl. ov. ignd	21) Cons Busi	Name of igned ness	of 22)	Type o Waste		Qty. n/yr.)	24 C City of C Busi	ontrl. /Prov. onsign ness
		Recycl	e							Reuse			
25) Type 26 of Waste	) Trmt (recycle) uantity (ton/yr)	27) Na of Re Produ	me 2 cyc ct	8) Pro Quanti (ton/y	duct ty r)	29)	Sum of Produc	30) t	Type o Waste		Reuse Details		Sum of duct
									_		_		

(Form No. 36)

Summary Re Classification Code & Document No. Receiver	port of	Disposal	of I		Date:	er(Signature)	)
l) Name of Business			<u> </u>	<u></u>		2) Name (President)	
3) Type of Business		4) Permi Numbe				5) Waste for Disposal	
		Disp	osal	Facility		L	
6) Name of Facility	7) Si (0	lze Capacity)		ate of blishment		ocation	
					·		
	 De	etails of	Co11	ection of	Wast	e	
10) Type of 11) Name Waste Cons Busi	lgned	12) Quant (ton/		13) Type Wast		14) Name of Consigned Business	15) Quantity (ton/yr)

		Classes	Generation	Physical	Dis	osal	by Ov	ner			Dispo	sal b	y Con	signm	ent	Ory	Business Name of	C1;	assi	fic	ati	io
rpe	5		Quantity	State	fotal	R/R	Inc.		(111 1:5:		Tota		Disp		Pub.	strd.	name or Consigner		mber			
		Cadmium		}	<u> </u>				<u></u>				·						<u> </u>		<u> </u>	٦
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	S	Org. P		† <b></b> -	1			1			1								1-		1-	
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	eci	rcp					I															
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	M	Mixture																				
		Sub fotal	·		ł			┣━━				·										•
	s	Syn. Resins Syn. Fabric			<b> </b>															$\vdash$		
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	10	Syn Leather						<u> </u>														-
	പപ	Other Syn.			┨────																	•
		Polymers		]	[			]														
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	al	Sulfuric		<u> </u>				<u> </u>				<u> </u>							$\vdash$			-
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	Ac	Others Sub. Total		<u> </u>			<u> </u>		·						·						<u> </u>	-
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	89	Rubbers Excreta																				
	or	Sludges																				
		Sub. Total																				
:		Scrap Metal																			_	
		Ceramics																			L	
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# (Form No. 37)

Local Government Landfill Si

(Form No. 38)

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					La	10		(11)			Quantity		it:		yr)	
ype	5	Classes	Quantity Collected		Quantity <sup>R/</sup> R	Quantity Inciner- ated	Land Self Owned	Landfill Business for Ind Waste	Local Gov't	Public Landfil	Stored	Numb		ation		
		Cadmium		i	I			Waste		1			<u> </u>	r		r
		Cyanide		[		1	1			1	t			1		1-
	s	Org. P				1				1			1	<b> </b>		┢
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	Hazardou	Arsenic		<u> </u>		1	1			1						1-
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	al									ł						
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	Spec	Copper				1										Γ
		Sub Total				[										Γ
		Lub. Oils														Γ
	~	Mineral Oil other than				1										ſ
	:1s	lub. oils		l		ļ	I						I			.
Oil	0i	Plant														L
	e	<b>Car Pitches</b>														
	st	Solvents											L			I
	Wa	Mixture														
		Sub Total														Ľ
		Syn. Resins														
;	ns	Syn. Fabric														L
Turus ti tat	sin	Syn Rubbers														Ľ
	ູ້	Syn Leather												I		
	H.	Other Syn.		1		ļ				Į –			l			l
	y n	Polymers														l.
	S.	Sub. Total				ļ	L							1		Į_
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	ka	Sulfuric				l				<b></b>			I			<b> </b> _
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(Form No. 39)

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(7)	KOREAN-ENGLISH GLOSSARY OF TERMS
가연성	Combustible
가용자원회수	Resource Recovery
가축 사육	Breeding of Livestock
개정	Amendment
건물	Building
건설부 장관	Minister of Construction
건축주인	Builder
결재	Decision
관리인	Manager/Caretaker
관리 카드	Management Card
건조 비료화	Fertilization
건축과	Construction Division
건평	Area of Floorage
결격 사유	Disqualification
고물	Secondhand Goods
 고온 일분해	High Temperature Destruction
공공 주택 단지	Public Residential Area
공공 처리 시설	Public Treatment (Disposal) Facility
공단	Industrial Complex
공업 진흥 청장	Administrator of Industry Promotion Administration
공업	Industry
공원	Park
공정도	Process Scheme
공중 변소	Public Restroom
공중 위생 시설	Public Sanitany Facility
광장	Square
공포	Promulgation
교통부 장관	Minister of Transportation
국립 환경 연구원	National Environmental Research Institute
국민 보건	Public Health
국서	National Tax
규칙	Regulation
군수	County Head
금치산자	Incompetent
기능 점검	Function Check
기계 선별	Mechanical Seperation
기생충 질환 예방법	Parasite Disease Prevention Law
기술 관리인	Technical Ability Manager
기술 능력	Technical Capablility
( L )	
내구성	Durablility
내수성	Water-Resistance
내연성	Heat-Resistance
농림 수산부 장관	Minister of Agriculture and Fisheries
녹지	Green-Belt

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대기오염 대기오염물질 대여 대통령령 도로 도지사 등록 등록증	Air Pollution Air Pollutant Rent/Lease Presidential Decree Road Governor/Governor of Province Registration Certificate of Registration
( 2 )	
( ")	
매립시설 무기물 문화재 보호법 민원실	Landfill Facility Inorganics Cultural Properties Protection Law Public Service Center
(н)	
발송 (통보) 발신 방류수 상태 방사성 물질 방지 시설 배출 제출 시설 배출 전용기준 변경 허가 보건사회부 복지 부패 보고 정화 문고 정화조 제조업 분규기호 분해 분해 시설	Return(Notification) Sender Effluent Quality Radioactive Substance Prevention Facility Generation/Discharge Discharge Facility Discharge Permission Standard Modification/Change Permit for Change Ministry of Health & Social Affairs(MOHSA) Cover Area of Site Addenda Septic Excreta Night Soil Treatment Tank Night Soil Treatment Tank Manufacturing Business Night Soil Treatment Facility Classification No. Decomposition Decomposing Facility
불연성 불용화 비료 <b>화</b>	Non-Combustible Fixation Fertilization

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사무실 면적	Office Area
사업자	
사업주	Businessman
사업장 소재지	Business owner
사회과	Location of Business Establishment
	Social Welfare Division
산림	Forest
산업폐기물	Industrial Waste
산업폐기물과	Industrial Waste Division
산업폐기물 배출업자	Industrial Waste Discharger
산업폐기물 처리시설	Industrial Waste Disposal Facility
산업폐기물 처리업	Industrial Waste Disposal Business
산업폐기물 처리업자	Handler of Industrial Waste Disposal
산화	Oxidation
산화지방법	Oxidation Basin Process
살수여상방법	Trickling Filter Process
상공부장관	Minister of Commerce & Industry
상수도	Water System
상업	Commerce
상호(명칭)	Name of Business
생물학적산소요구량	Biological Oxygen Demand(BOD)
생산공정	Production Lines
생산량	Production Quantity
생활환경	Human Environment
생활폐기물과	Domestic Waste Division
서류검사	Document Check
서울특별시장	Mayor of Special City of Seoul
설계도서	Design Drawings/Blueprints
설계시공업	Design & Construction Business
설비	Facility
설치	Construction
설치자	Constructor
성명(대표자)	Name (President)
세입징수관사무처리규칙	Revenue Agent's Official Regulation
소각	Incineration
소독	Disinfection
, 소독조	Disinfection Chamber
소유자	Owner
소화	Digestion
수득율	Yield
수산청장	Administrator of National Fisheries Administration
수선별	Manual Seperation
수세식 변소	Flush Toilet
수수료	Fee
수신	Receiver
수입인지	Coupon of National Government
수입제한	Import Restriction
<b></b>	

수입증지 수집 오염 수집 운반업 수집처 승인 쓰레기 적환장 시础레기 적환장 시공자 지미트 고형화 시설 가 시절 사 시행령 신고먼트 신고인 신원증명서 신청인 실험실 면적	Coupon of Local Government Water Pollution Collection Collection/Transprotation Business Collection Place Approval Refuse Refuse Transfer Station(RTS) Construction Monitor Contractor of Construction Cement Solidification Facility Facility Inspection Mayor Enforcement Decree Report No. Report Reporter Affidavit Applicant Lab Area
(	
액비화 업종 연료화 영업구역 오니 오물청소법 오물추기 오수분류식관거 오수정화시설 완공일 용당 한사실 완공일 용당 한사실적 운반실적 위탁법적 위탁업소 위탁업소 위탁업소 위탁업소 위탁업소 위탁러처 유기관리 유지관리 유지관리 이동변소	Liquid Fertilization Type of Business Refuse Derived Fuel(RDF) Region Of Business Sludge Garbage Disposal Law/Sewage Disposal Law Open Waste Dumping Seperate Sewer System Domestic Sewage Treatment Facility Date of Completion Usage Melting Extraction Potential(EP) Test Transportation Transportation Record Transportation Business Sanitary Delegation/Consignment Consigned Contractor Disposal by Consignment Organics Organic Fertilizer Facility Oil & Water Seperation Operation & Maintainance Portable Toilet

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이용 시설	Reuse Facility
이전	Relocation
일반산업폐기물	General Industrial Waste
일반폐기물	Domestic Waste
일반폐기물 처리업	Domestic Waste Disposal Business
일반폐기물 처리업자	Handler of Domestic Waste
임호프	Imhoff
(又)	
자가매립지 자본금 자연환경 잔해물 장기부숙조 장기목기조 장비 재개업 재개업 재개업부 재생분류기물 재생분류기물 재생분류기물 재생분류기물 재생분에 기록실비 적접추산화방법 정화조정지 제조지 확방법 정화조정지 제조지 확방법 정화조정지 제조지 확방법 정화조정지 제조지 확방법 정화조정지 제조지 확방법 정화조정지 제조지 확당한법 정화조정지 제조지 확당한법 정화조·미 전 · · · · · · · · · · · · · · · · · · ·	Self Landfill Site Capital Natural Environment Residues Extended Septic Tank Extended Aeration Tank Equipment Ash Reopen of Business Reissue Recycle Recycle by Separation Recycable Waste Detention Basin Location of Loading Filing Contact Stabilization Process Contact Oxidation Process Septic Tank Cleaning Business Manufacturing Scheme Manufacturing Facility Residence Residence Registration No. Address(Location of Business Establishment) Main Source(Collection Place) Housing Construction Promotion Law Inspection of Completion Small Business Establishment Support Law National Government Agency Neutralization Regulation/Ordinance Measures Final Treatment Guidance/Supervision Local Tax
지방자치단체	Local Government
직할시장	Mayor of City under Direct Control of National Gov.
징역	Imprisonment

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착공일	Starting Date of Construction
첨부서류	Enclosure
처리기간(서류)	Disposal/Treatment
처리기관(서류)	Process Time
처리기준	Processing Office
처리하력	Disposal Standard
처리방법	Disposal Capacity
처리업	Disposal Capacity
처리업	Disposal Method
처리업자	Disposal Business
처리업자	Disposal Facility
처리업자	Disposal Contractor
청소업자	Transactions
축사	Cleaning Division
축산폐수정화시설	Cleaning Contractor
침전	Cattle Sheds
침전	Livestock Wastewater Treatment Facility
침전	Sedimentation
침전	Settling Tank
침 출수	Leachate
(E)	
탈수	Dewatering
토목기사	Civil Engineer
토양침투	Leaching Field
토지	Land
퇴비화	Composting
투입	Intake
특절상소구역	Specially Clean Area
특정산업폐기물	Special Industrial Waste
특정유해물질	Special Hazardous Substances
특정유해산업폐기물	Special Hazardous Industrial Waste
(	
판매	Sale
폐그무	Waste Rubber
폐기물	Waste
폐기물관리법	Waste Management Law
폐기물투기	Open Dumping
폐산/알카리	Waste Acid/Alkali
폐업	Termination of Business

폐유	Waste Oil
폐지	Abrogation
폐합성수지	Waste Papers
(ㅎ)	Waste Synthetic Resins
하수도         하수도법         하수치리장         하천         한국공업규격         한국자원재생공사         한국자원재생공사         한국지원재생공사         한정치산자         합류식관거         항만         행정처분         허기         협의(확인) 기관         호수         환경기성         환경기사         환경기사         환경기사         환경기사         환경기사         환경기사         환경기사         환경기사         환경기상         환경기상         환경기성         환경기상         환경기상         환경기상         환경기사         환경기사         환경기사         환경기상         환경기상         환경기상         환경기상         환경경기상         환경성장         환경성장         환성오니노         활성오니초         활성오니초         활성오니초         활성오니초         활성         회석 존정	Sewer System Sewer System Law Sewage Treatment Plant River Korean Industrial Standard Korean Resources Recycling Corporation Quasi-Incompetent Combined Sewer System Harbor Administrative Measures Permit Anaerobic Coordinating(Confirming) Office Aerobic Lake Chemical Engineer Environment Environmental Management Division Environmental Engineer Environmental Technic Review Committee Environmental Preservation Law Environmental Pollution Protection Business Corps Environmental Administration Administrator of Environmental Administration Regional Administrator of Environmental Administration Regional Administrator of Environmental Administration Reduction Activated Sludge Process Activated Sludge Tank Re-Collection Rotating Biological Contactor(RBC) Process Suspension of Business Dilution Control

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# ( A ) ENGLISH-KOREAN GLOSSARY OF TERMS

Abrogation	폐지
Activated Sludge Process	활성오니방법
Activated Sludge Tank	활성오니조
Addenda	부칙
Address(Location of Business Establishment)	주소(사업장)
Administrative Measures	행정처분
Administrator of Environmental Administration	환경청장
Administrator of Industry Promotion Administration	공업 진흥 청장
Administrator of National Fisheries Administration	수산청장
Aerobic	호기성
Affidavit	신원증명서
Air Pollutant	대기오염물질
Air Pollutant	대기오염
Anaerobic	제
Applicant	기성
Approval	신청인
Area of Floorage	승인
Ash	건평
( B )	재
Biological Oxygen Demand(BOD)	생물학적산소요구량
Breeding of Livestock	가축 사육
Builder	건축주인
Building	건물
Business owner	사업주
Businessman	사업자
( C )	
Capital	자본금
Cattle Sheds	축사
Cement Solidification	시멘트 고형화
Certificate of Registration	등록증
Chemical Engineer	화공기사
Civil Engineer	토목기사
Classification No.	분류기호
Cleaning Contractor	청소업자
Cleaning Division	청소과
Collection	수집
Collection	수집
Collection Place	수집
Collection/Transprotation Business	수집
Combined Sewer System	산업
Combustible	가연성
Commerce	상업

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Composting Consigned Contractor Construction Division Construction Construction Monitor Constructor Contact Oxidation Process Contact Stabilization Process Contractor of Construction Coordinating (Confirming) Office Correctional Measures County Head Coupon of Local Government Coupon of National Government Cover Cultural Properties Protection Law

## (D)

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Date of Completion Decision Decomposition Facility Decomposition Delegation/Consignment Design & Construction Business Design Drawings/Blue Prints Detention Basin Dewatering Digestion Dilution Control Discharge Facility Discharge Permission Standard Disinfection Chamber Disinfection Disposal by Consignment Disposal Capacity Disposal Contractor Disposal Method Disposal Standard Disposal/Treatment Disgualification Document Check Domestic Sewage Treatment Facility Domestic Waste Disposal Business Domestic Waste Division Domestic Waste Durablility

위탁업소 건축과 설치 시공 감리자 섭치자 접촉산화방법 접촉안정방법 시공자 협의(확인)기관 조치명령 군수 수입증지 수입인지 복토 문화재 보호법 완공일 결재 분해 시설 분해 위입/위탁 설계시공업 설계도서 저류섭비 탈수 소화 희석조정 배출시설 배출허용기준 소독조 소독 위탁처리 처리능력 처리업자 처리방법 처리기준 처리 결격 사유 서류검사 오수정화시설 일반폐기물 처리업 생활폐기물과 일반폐기물 내구성

퇴비화

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(F)

Facility	시설
Facility Inspection	시설검사
Fee	수수료
Fertilization	비료화
Filing	접수
Final Treatment	종말처리
Fixation	불용화
Flush Toilet	수세식 변소
Forest	산림
Function Check	기능 점검

(G)

Garbage Disposal Law/Sewage Disposal Law General Industrial Waste Generation/Discharge Governor/Governor of Province Green-Belt Guidance/Supervision	오물청소법 일반산업폐기물 배출 도지사 녹지 지도/감리
Surdance/Supervision	

(H)

Handler of Domestic Waste	일반폐기물 처리업자
Handler of Industrial Waste Disposal	산업폐기물 처리업자
Harbor	항만
Heat-Resistance	내연성

High Temperature Destruction	고온 열분해
Housing Construction Promotion Law	주택건설촉진법
Human Environment	생활환경
( I )	
Import Restriction	수입제한
Imprisonment	징역
Incineration	소각
Incompetent	금치산자
Industrial Complex	공단
Industrial Waste Discharger	산업폐기물 배출업자
Industrial Waste Disposal Business	산업폐기물 처리업
Industrial Waste Disposal Facility	산업폐기물 처리시설
Industrial Waste Division	산업폐기물과
Industrial Waste	산업폐기물
Industry	공업
Inorganics	무기물
Inspection of Completion	준공검사
Intake	투입
(J)	
( K )	
Korean Industrial Standard	한국공업규격
Korean Resources Recycling Corporation	한국자원재생공사
(L)	
Lab Area	실험실 면적
Lake	호수
Land	토지
Landfill Facility	매립시설
Landfill Site of Local Government	지방자치단체매립지
Leachate	침출수
Leaching Field	토양침투
Liquid Fertilization	액비화
Livestock Wastewater Treatment Facility	축산폐수정화시설
Local Government	지방자치단채
Local Tax	지방세
Location of Business Establishment	사업장 소재지
Location of Loading	적재장소

(M)

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Main Source(Collection Place)

주요발생원(수집처)

유지관리 Maintenance & Operation 관리 카드 Management Card 관리인 Manager/Caretaker 수선별 Manual Separation 제조시설 Manufacturing Facility 제조공정 Manufacturing Scheme 시장 Mayor Mayor of City under Direct Central Government Control 직할시장 서울특별시장 Mayor of Special City of Seoul 기계 선별 Mechanical Seperation 용용 Melting 농림 수산부 장관 Minister of Agriculture and Fisheries 상공부장관 Minister of Commerce & Industry 건설부 장관 Minister of Construction 교통부 장관 Minister of Transportation 보건사회부 Ministry of Health & Social Affairs (MOHSA) 변경 Modification/Change (N) 상호(명징) Name of Business 성명(대표자) Name (President) 국립 환경 연구원 National Environmental Research Institute 중앙행정기관 National Government Agency 국세 National Tax 자연환경 Natural Environment 중화 Neutralization 분뇨 처리 시설 Night Soil Treatment Facility 분뇨 정화조 제조업 Night Soil Treatment Tank Manufacturing Business 불연성 Non-Combustible (0)사무실 면적 Office Area 유수분리 Oil & Water Seperation 오물투기 Open Dumping 유기비료화시설 Organic Fertilizer Facility 유기물 Organics 소유자 Owner 산화지방법 Oxidation Basin Process 산화 Oxidation (P) 기생충 질환 예방법 Parasite Disease Prevention Law 공원 Park 변경 허가

Permit for Change

Permit Portable Toilet Presidential Decree Prevention Facility Process Time Processing Office Production Lines Production Quantity Progress Schematic Promulgation Public Health Public Residential Area Public Sanitany Facility Public Service Center Public Restroom Public Treatment (Disposal) Facility	허가 이동변소 대통령령 시설 가리기간 생산량 고국 고공 신 가리기관 생산량도 보 구택 신설 고공중 위생 시설 고공 처리 시설
(Q)	
Quasi-Incompetent	한정치산자
(R)	
Radioactive Substance Re-Collection Receiver Recycable Waste Recycle by Seperation Recycle Reduction Refuse Derived Fuel(RDF) Refuse Disposal Business Refuse Disposal Facility Refuse Refuse Transfer Station(RTS) Region Of Business Regional Administrator of Environmental Admin. Registration Regulation/Ordinance Reissue Relocation Rent/Lease Reopen of Business Report Report No. Reporter Residence Registration No. Residence	방사성 물질 회수 수신 제기물 재생분류 지생분류 리입 연료례기기 저 환원 연료례기기 저 환장 연료례기기 저 환장 영환경적 규칙 지 이전 호 인 지 이전 이 이 지 인 이 이 다 지 신 고 고 인 문록번 호 주거

Residues Resource Recovery Return(Notification) Reuse Facility Revenue Agent's Official Regulation River Road Rotating Biological Contactor(RBC) Process	잔해물 가용자원 회수 발송 (통보) 이용 시설 세입징수관사무처리규칙 하천 도로 회전원판접촉방법
( S )	
Sale Sanitary Secondhand Goods Sedimentation Self Landfill Site Sender Separate Sewer System Septic Septic Tank Cleaning Busi Septic Tank / Night Soil Treatment Tank Settling Tank Sewage Treatment Plant Sewer System Law Sewer System Sita Sludge Small Business Establishment Support Law Social Welfare Division Special Hazardous Industrial Waste Special Hazardous Substances Special Industrial Waste Special Industrial Waste Specially Clean Area Square Starting Date of Construction Suspension of Business	판매 위생 고물 침전 자가매립지 발신 오수분류식관거 부패 정철소업 분대 전화조 참수분류식관거 부패 정호조 참소입 분대 전화조 참수수도 하수도법 하수도법 하수도법 하수도 보 지입창업지원법 특정유해산업폐기물 특정산업폐기물 특별정소구역 광장일 휴업
(T) Technical Ability/Capablility Technical Manager Termination of Business Transactions Transportation Business Transportation Record Transportation Trickling Filter Process Type of Business	기술 능력 기술 관리인 폐업 처분사항 운반업 운반실적 운반 살수여상방법 업종

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(U)

Usage

(V)

(W)

폐기물 Waste 폐산/알카리 Waste Acid/Alkali 폐기물관리법 Waste Management Law 폐유 Waste Oil 폐지 Waste Papers 폐고무 Waste Rubber 폐합성수지 Waste Synthetic Resins 수질 오염 Water Pollution 상수도 Water System 내수성 Water-Resistance

(X)

(Y)

Yield

(Z)

용도

수득율