

HAZARDOUS WASTE MANAGEMENT

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Effective Date	30 Jul 2016
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REVISION HISTORY			
Rev. No.	Effective Date	Details of Revision	
00	30 Jul 2016	Initial Release	

1. PURPOSE

- 1.1 This procedure will provide information on the proper management of hazardous waste in compliance with RA 6969 or better knowns as Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990.
- 1.2 This will also ensure that the management of hazardous waste is conducted in an environmentally sound manner and that risks to health, safety and environment are minimized.

2. SCOPE

- 2.1. This procedure covers the generation, segregation, labeling, collection, storage, transport, treatment and final disposal of hazardous waste
- 2.2. Coverage of these procedure includes hazardous waste generated in the following area/process:
 - PRQ and WHR: Laboratory expired chemicals, waste chemicals which falls on the classification specified in DAO 2013-22, empty contaminated chemical containers, chemical contaminated rags, papers, PPE
 - Warehouse: Expired chemicals, empty contaminated chemical containers
 - Maintenance: Used Lead Acid Batteries (ULABs), Busted Fluorescent Lamps (BFL), Damaged container previously containing chemicals (e.g. lubrication materials, diesel, oils, etc.)
 - Administration: Grease from canteen
 - MIS: Waste Electrical and Electronic Equipment (WEEE)
 - Clinic: Pathological, pathogenic and contagious waste, including sharps
 - General Area: Waste contaminated with chemicals/oils, waste paints
 - Other hazardous waste not mentioned above and is classified under DAO 2013-22
- 2.3. This does not cover radioactive waste and waste covered under RA 9003 (Ecological Solid Waste Management Act)

3. RESPONSIBILITY AND AUTHORITY

- 3.1. Department/section head shall ensure strict implementation of this procedure on their respective area. Uncertainties relevant to this procedure shall be coursed through by the department/section head
- 3.2. The Pollution Control Officer shall ensure compliance to DAO 2013-22 and its coherence to this procedure. He shall also ensure the personnel directly involved in the handling of the hazardous waste

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3.3. The Integrated Management Representative together with the Deputy EMR is the over-all responsible in effective implementation of this procedure.

4. RELATED DOCUMENTATION

- RA 6969 Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990
- DAO 2013-22 Revised Procedure and Standards for the Management of Hazardous Waste
- Annex A: Hazardous Waste Yellow Label
- EHS-ENV-PRO-002 Spill Management Plan

5. PROCESS DETAILS

5.1. Generation of Hazardous Waste

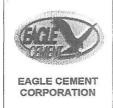
- 5.1.1. Chemical Waste Avoidance and Minimization Chemical users should employ strategies for avoiding and minimizing production of chemical waste whenever applicable. Where applicable, these strategies may be used:
 - · Avoid over-ordering chemicals
 - · Replace hazardous compounds with less hazardous compounds if possible
 - · Minimize the quantity of hazardous materials used
 - Take periodic inventories of chemicals and investigate likely hiding places for chemicals
- 5.1.2. All employees, including those working in behalf of the company shall initiate a conscious effort on green purchasing to avoid introduction/generation of hazardous waste from source.
- 5.1.3. If it can't be avoided, materials that have potential to be hazardous waste shall be handled in a "Cradle to Grave" approach in accordance with the requirement of DAO 2013-22
- 5.1.4. Below guidelines can be used as reference for waste liquid chemicals

5.1.4.1. SEWERABLE CHEMICALS

- Waste must be miscible (soluble) with water
- Waste must not be TOXIC or hazardous to aquatic, marine and terrestrial life and environments (refer to MDS)
- Waste must not be FLAMMABLE at the point of being sewered (i.e. when it is put down the sink). Acceptable flammable liquids must therefore be less than 10% of their explosive concentrations (refer to SDS) before being sewered; and

Waste solutions must be within a pH range of 6.5 to 8.5.

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NOTE: Dilution is an acceptable means of overcoming appropriate disposal but always refer to the DENR-EMB Priority Chemical List and under Republic Act 9275 "Philippine Clean Water Act Generally for guidance.

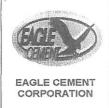
5.1.4.2. NON-SEWERABLE SCHEMICALS

- 5.1.4.2.1. Waste containers appropriate to the hazardous waste classification shall be maintained for non-sewerable substances
- 5.1.4.2.2. Waste containers should be turned over at least every 6 months to avoid instability of chemicals and container degradation.
- 5.1.4.2.3. Only one 'individually generated' chemical waste is permitted in each container. DO NOT mix chemical waste from different processes, even if they are of similar properties the waste disposal contractor will assess which wastes can be combined and will perform this task.

5.2. Segregation and Labeling of Hazardous Waste

- 5.2.1. When a hazardous waste is generated on the area, the generating department/section shall accomplish EHS-ENV-FOR-013 Hazardous Waste Endorsement Form and temporarily stage the items on the waste bins designated for specific hazardous waste. They shall immediately inform the Pollution Control Officer (PCO) and arrange for pick up. The original copy of the form shall be kept and monitored by the generator. The duplicate copy of the form shall be kept by the PCO for proper monitoring.
- 5.2.2. Segregation of hazardous waste shall be in accordance with:
 - Chemical Properties Hazardous waste with incompatible chemical properties that could react with each other such as but not limited to: (a) strong acids and strong base should be placed in separate containers a d kept in separate spill containment area
 - Hazardous Waste Type Hazardous waste shall be segregated from mixed, healthcare and nonhazardous waste.
 - Hazardous Waste State Solids. Liquids and Gases (aerosol or gas cylinder) shall be
 placed in separate containers and kept in separate spill containment areas.
- 5.2.3. No hazardous waste shall be allowed temporary staging for more than 1 week on the respective section/area, especially on waste that requires special handling procedure. Do not store incompatible material near each other while waiting to have it picked up.
- 5.2.4. Once the hazardous waste is acknowledged by the PCO, it shall be labeled accordingly in reference to the requirements of DAO 2013-22. Refer to Annex A: Hazardous Waste Yellow Label
- 5.2.5. Hazard label (Refer to 6.3 Placards Accompanying Label of DAO 2013-22) shall accompany the label representing the hazard classification.

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5.3. Collection of Hazardous Waste

- 5.3.1. Properly trained EHS personnel shall collect the hazardous waste duly acknowledged by the PCO.
- 5.3.2. Unsegregated hazardous waste shall not be collected and Nonconformity Action Report (NCAR) shall be issued to the area owner once verified not in conformance with the requirements of this procedure.
- 5.3.3. Waste containers should not be more than 80% full and they must be turned over regularly to maintain chemical stability and container integrity. DO NOT accumulate large quantities of chemical waste so that they become a hazard.
- 5.3.4. Waste generators are responsible for putting chemical wastes out for collection at designated areas

5.4. Storage of Hazardous Waste

- 5.4.1. Properly trained EHS personnel shall collect the hazardous waste duly acknowledged by the PCO. The PCO shall ensure the appropriateness of the labelling and segregation of hazardous waste at the Hazardous Waste Storage Area.
- 5.4.2. Accumulated hazardous waste shall be stored for not more than a year. Proper arrangement shall be made to a hazardous waste TSD Facility (Treatment, Storage and Disposal) in a timely manner

5.5 Transport, Treatment and Final Disposal of Hazardous Waste

- 5.5.1 Transport, treatment and final disposal shall be arranged by the PCO through the online hazardous waste manifest system.
- 5.5.2 ECC shall only obtain the service of the credible and DENR accredited TSD Facility.
- 5.5.3 The PCO shall conduct an audit prior to entering a contract with the TSD Facility to verify its credibility and environmentally sound practice. An annual audit shall be done moving forward to ensure that the said TSD Facility adheres to the requirement of DAO 2013-22.
- 5.5.4 In cases where the TSD Facility was issued with a Notice of Violation (NOV) or a Cease and Desist Order (CDO), the contract shall be immediately terminated and has to undergo appropriate qualification again.
- 5.5.5 The Hazardous Waste Contingency Plan shall be prepared and discussed accordingly with the TSD Facility especially to those handling the hazardous waste.

5.6 Contingency Plan

5.6.1 Refer to the EHS-ENV-002 Spill Management Plan for the Details on the Contingency Plan

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5.7 Training to Affected Personnel

- 5.7.1 All personnel directly handling hazardous waste shall be trained/oriented on this procedure. Topics shall include:
 - Waste identification (types and characteristics)
 - Hazards and risks in handling hazardous wastes
 - Labeling and Placarding
 - Proper storage
 - Waste minimization
 - Types of potential emergencies arising from wastes handling,
 - storage, and treatment and disposal
 - Spill Management Plan
 - Personal Protective Equipment (PPE)
 - Laws and regulations concerning hazardous waste management:
 - Monitoring requirements

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Annex A: Hazardous Waste Yellow Label (20 cm x 30 cm)

	IAZARDO	US WASTE
Waste Information	HW Class and No.	
	Characteristic and Form	
	Volume	
	Packaging Date	
	Shipping Date	
	Waste Transport Record Number	
Generator Information	ID Number	
	Name	
	Address	
	Telephone #	
	Fax#	
	Name of HWMS or PCO	

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