



Laboratory Hazardous Wastes Management Plan Effective:
March 2017 as
approved by the
Chancellor's Council
Document Code:
PCO-CSO-HW-001

Prepared by:

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### 1. Purpose

The Laboratory Hazardous Waste Management Plan seeks to ensure and maintain a safe and secure environment for the management of the hazardous wastes and materials. It also responds to the compliance requirements of the DENR EMB rules and regulations on hazardous wastes management.

De La Salle University is committed to maintaining programs, projects and activities designed to prevent and reduce the risks of hazardous wastes and materials by ensuring its proper handling, transport, treatment and disposal.

#### 2. Scope

This document defines the procedures for the proper disposal of different laboratory wastes and materials generated by the following different academic and research units: Chemistry, Biology, Physics, Psychology, Engineering and College of Computer Studies- Computer technology. Below is a listing of the different hazardous wastes and materials together with the registered waste code and classification covered by the plan:

Waste Code	Classification	
B201-B299	Acid Wastes	
C301-C399	Alkali Wastes	
D402-D499	Wastes with Inorganic Chemicals	
E501,E502,E503,E599	Reactive Chemical wastes	
F601-F699	Inks/Dyes/pigments/Resins/Adhesive/Latex/organic/	
	sludge	
G703-G704	Waste organic Solvent	
H802	Grease Wastes	
I101	Used oil	
J201	Containers	
K301-K303	Stabilized Wastes	
L401,L402,L403, L404	Organic Chemicals	
M501,M503,M504,M506,M507	Miscellaneous Wastes	

Page 1 of 8	De La Salle University- Manila	Revision 00



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## 3. Roles and Responsibilities

## a. Laboratory Coordinators

- Supervise laboratory Technicians and personnel on the proper management of hazardous wastes ensuring its proper handling, storage, labeling, transport and disposal.
- Provide the training/seminar to the laboratory Technicians and personnel such as proper handling, storage, labeling, transport and disposal of accumulated laboratory hazardous wastes and materials.
- Furnish the University Pollution Control Officer (PCO) with an updated list of hazardous wastes and materials generated by laboratory and research activities every term to ensure that these are properly documented and registered with the DENR – EMB.

## b. Laboratory Technicians

- Monitor the proper storage, labeling, transport and disposal of accumulated laboratory hazardous wastes and materials.
- Conduct monthly inventory of hazardous wastes according to their registered classifications and codes.
- Ensure the timely transport/disposal of hazardous wastes and materials to the hazardous wastes facility of the University in close coordination with the University Pollution Control Officer.
- Coordinate with Building and Ground Maintenance Office (BGMO) for the schedule of the disposal of hazardous waste materials. The request should be made two (2) days prior schedule of disposal.
- Laboratory Technicians shall assist the Diar's personnel during the disposal of the hazardous waste material to the hazardous waste storage facility.



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#### c. Researchers

- Ensure the proper storage and labeling of hazardous wastes and materials in the laboratory.
- Conduct inventory of hazardous wastes generated by research/thesis according to their registered classifications and codes and submit to the laboratory Technicians/coordinator.
- Coordinate with the laboratory Technicians the disposal/transport of the hazardous waste materials generated to the hazardous wastes storage facility.

### d. Faculty & Students using Laboratory Facilities

- Faculty shall provide orientation to the students regarding the proper handling, storage and disposal of hazardous waste materials prior to the conduct of experiments and lab activities.
- Faculty shall monitor and supervise student activities during classes to ensure the proper handling and management of hazardous materials.
- Faculty and students using the laboratory shall ensure that all accumulated chemical and hazardous waste materials are labeled according to the DENR classification code standards and coordinate with the laboratory Technicians for proper storage and transfer to the hazardous waste storage facility.

### e. University Pollution Control Officer

- Ensure the proper storage as well as the periodic and timely transport, treatment and disposal of all hazardous wastes and materials generated by the University stored in the hazardous wastes storage facility to accredited treatment and disposal facilities.
- Provide proper personal protective equipment (PPE's) to the laboratory
   Technicians and personnel during the transport and storage of wastes.
- Assist the laboratory Technician in the transport of hazardous wastes and materials to the HAZARDOUS WASTES STORAGE FACILITY.



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## 4. Procedure Details

- a. All laboratories disposing hazardous wastes and materials shall follow the NO LABEL, NO DISPOSAL/COLLECTION Policy.
- b. Personnel handling hazardous wastes and materials shall wear appropriate personal protective equipment (PPE) at all times. The following are the prescribed PPE:
  - safety mask/respirator
  - o chemical goggles
  - o rubber gloves
  - o hard hat
  - safety shoes or safety boots (closed shoes)

Activities	a. The laboratory coordinator coordinates with the University PCO in properly identifying the appropriate and compatible container/s applicable to the different types of hazardous wastes and materials.  b. The Chemistry, Biology, Physics, Psychology Engineering Departments and College of Computer Studies- Computer technology shall coordinate with the University PCO to determine the appropriate containers.	
Preparation of Containers for Liquid Wastes		
Segregation and Storage of Liquid Waste	<ul> <li>a. All Laboratory Technicians shall be trained on the proper handling, segregation and storage of hazardous waste.</li> <li>b. The Laboratory Coordinators shall instruct the laboratory Technician on the proper segregation and storage of their hazardous wastes according to the classification prescribed by DENR – EMB.</li> <li>c. The University PCO shall inspect the laboratories to ensure compliance.</li> </ul>	

Page 4 of 8	De La Salle University- Manila	Revision 00



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Activities	Duties and Responsibilities	
Disposal of Liquid Waste & Solvents	<ul> <li>a. The Laboratory Technician shall coordinate with the University PCO when the hazardous waste containers accumulated in their laboratories are already full and ready for transport to the storage facility.</li> <li>b. The University PCO shall give a hazardous waste disposal form for the processing of requests for transfer of wastes from the laboratories to the hazardous waste facility.</li> <li>c. The laboratory Technicians shall prepare the wastes for disposal based on prescribed classifications and codes ensuring that these are properly labeled and stored accordingly in the storage facility.</li> </ul>	
Disposal of Broken Lab Glass Wares and Hazardous Waste Containers and Packaging	<ul> <li>a. Each laboratory shall have an appropriate and properly labelled bin or container dedicated for the storage of broken laboratory glass wares and other chemical waste packaging and containers.</li> <li>b. The Laboratory Technicians shall coordinate with the University PCO for the issuance of plastic bins and drums.</li> </ul>	
Disposal of Unused Excess or Chemical Samples	<ul> <li>a. Retention of samples or excess chemicals shall be kept at a minimum.</li> <li>b. The samples shall be labelled accordingly to the waste categories and codes.</li> <li>c. Samples and excess chemicals should not be kept in the laboratory for more than six (6) months.</li> </ul>	
Disposal of Expired Laboratory Reagents	The Laboratory Technician informs the University     PCO for the proper disposal of expired chemicals     ASAP.	
Inventory of Hazardous Wastes	The Laboratory Technicians shall provide the University PCO with a monthly inventory of the hazardous wastes and materials stored in the lab.	

Page 5 of 8	De La Salle University- Manila	Revision 00



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Activities	Duties and Responsibilities		
Labelling of Waste Containers	Laboratory Technicians shall be in-charge of properly labeling all hazardous waste containers used in the laboratory.		
Self-Monitoring Reports (SMRs) and Scheduling of Waste Hauling	<ul> <li>a. The submission of quarterly SMRs schedule quarterly as required by the DENR – EMB shall be the responsibility of the University PCO.</li> <li>b. Waste hauling is scheduled every three (3) months or as may be required based on urgency and safety concerns.</li> </ul>		
Waste Minimization	<ul> <li>a. The Chemistry Biology, Physics, Psychology, Engineering and College of Computer Studies-Computer technology faculty or Laboratory Coordinators shall review the laboratory experiments and activities and suggest possible alternatives in order to minimize the use of toxic chemicals.</li> <li>b. Other hazardous wastes and materials generated by the labs should be evaluated by the Lab Coordinators whether these should be disposed or may still be used for other purposes.</li> </ul>		



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# 5. Schedules of disposal of hazardous wastes

Department	Month			
	Week 1	Week 2	Week 3	Week 4
	Friday	Friday	Friday	Friday
College of Engineering				
Biology				
Chemistry				
Psychology				
Physics				
CCS				



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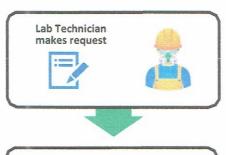
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6. Process diagram: Waste Transfer Process from Source to DLSU Hazardous Wastes and Materials Storage Facility



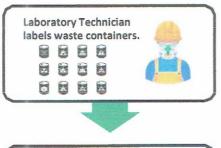
Laboratory Technician makes a request for transfer to storage facility by filling up the Hazardous Waste Disposal Form.



PCO receives, checks and processes waste collection documents.



PCO inspects waste materials vis-à-vis disposal form prior transport.



Laboratory Technician identify the hazardous waste materials and make sure that containers are properly labeled



Laboratory Technician in coordination with the PCO dispose the hazardous wastes material to the DLSU Wastes and Materials Storage Facility every Friday of the month.