



Announcement of Rajamangala University of Technology Phra Nakhon Policy on Hazardous Waste Management and Disposal

1. Rationale

To ensure that the management of Hazardous Waste within Rajamangala University of Technology Phra Nakhon (RMUTP) is conducted lawfully, in accordance with academic principles, and in compliance with relevant legislation (e.g., the Factory Act, the Hazardous Substances Act, the Public Health Act).

The University recognizes the importance of protecting the health and safety of its personnel, students, and the community, as well as preventing environmental impacts caused by improper hazardous waste management. To support the "Green University" policy, this policy and set of practices are hereby established.

2. Scope

This policy applies to the management of all types of hazardous waste generated from teaching, research, academic services, and other activities within all areas of the University. It covers all personnel, students, contractors, and other relevant persons.

3. Definitions

"Hazardous Materials / Waste" refers to waste or discarded materials that contain or are contaminated with hazardous substances, possessing at least one of the following characteristics:

- **Ignitable** (e.g., Solvents)
- **Corrosive** (e.g., Concentrated acids, strong bases)
- **Reactive** (e.g., Substances that react violently with water)
- **Toxic** (e.g., Heavy metal chemicals, carcinogens)
- **Infectious** (e.g., Biological waste, sharps from biological labs)
- **Specific Hazardous Wastes** (e.g., E-waste (batteries, circuit boards), fluorescent lamps (containing mercury), contaminated oil)

"Waste Generator" refers to the department, laboratory, or individual (faculty, researcher, student) whose activities generate the hazardous waste.

4. Policy Statements

1. **Generator Responsibility:** The Waste Generator has the primary duty and responsibility to correctly segregate, temporarily store, and label hazardous waste according to these practices.
2. **Waste Minimization:** The University promotes the 3Rs principle, prioritizing Reduce (chemical use), Reuse (if safely possible), and Recycle before disposal.
3. **Segregation:** It is strictly prohibited to dispose of hazardous waste mixed with general waste. Hazardous waste must not be discharged directly into drains, soil, or the environment.

4. **Proper Disposal:** All collected hazardous waste must be treated and disposed of only by a third-party service provider licensed by the Department of Industrial Works or other relevant government agencies.

5. Process and Practices

To ensure hazardous waste management complies with this policy, the University has established the following process and practices:

Step 1: Classification and Segregation

- Waste Generators (labs/departments) must segregate hazardous waste from general waste.
- Hazardous waste must be clearly separated by group. Incompatible materials must not be mixed.
 - e.g., Separate solids from liquids.
 - e.g., Separate halogenated solvents from non-halogenated solvents.
 - e.g., Separate acidic waste from alkaline waste.
 - e.g., Separate infectious waste from chemical waste.

Step 2: Containment and Labeling

- Waste must be stored in containers that are strong, corrosion-resistant, leak-proof, and tightly sealed.
- Containers must be affixed with a clear "Hazardous Waste Label" .
- The label must include at least the following information:
 1. The words "Hazardous Waste"
 2. Name and Department/Laboratory of the Waste Generator
 3. Waste composition details (e.g., chemical names)
 4. Hazard Pictograms (GHS Pictograms)
 5. Storage start date

Step 3: Temporary Storage at Source

- Waste Generators must designate a "Temporary Hazardous Waste Storage Area" within their department/laboratory.
- The area must be secure, well-ventilated, and away from heat sources, flames, and drains.
- Secondary containment (e.g., spill trays) should be used to prevent leaks.

Step 4: Disposal Request and Collection

- When a waste container is nearly full or has reached its storage time limit, the Waste Generator must submit a "Hazardous Waste Disposal Request Form" to the University's central unit (e.g., Office of Physical Plant and Environment or the EHS unit).
- The central unit will coordinate the collection of waste from the source and transfer it to the University's "Central Hazardous Waste Accumulation Facility."

Step 5: Final Disposal by Contractor

- The central unit will procure a legally licensed hazardous waste treatment and disposal contractor.

- The contractor must transport and dispose of the waste according to legal procedures and must issue a Hazardous Waste Transport Document (Manifest) as proof of disposal.

6. Roles and Responsibilities

- **University Administration:** Oversees the policy and allocates supporting budgets.
- **Central Unit (EHS/Physical Plant):** Manages the program, provides training, coordinates with disposal contractors, and maintains documentation (Manifests).
- **Deans / Heads of Departments:** Supervise their personnel to ensure compliance with this policy.
- **Waste Generators (Faculty/Researchers/Students):** Strictly adhere to Steps 1, 2, 3, and 4.

7. Enforcement

Failure to comply with this policy, which may lead to injury, environmental contamination, or legal violations, will be considered a disciplinary offense under the University's regulations.

Announced for general acknowledgment and compliance.

Announced on 24th October 2024