

# Waste Management Standard

## 1. Purpose

The objective of this document is to standardise waste management practices for Vedanta.

This standard applies to all Vedanta owned and managed facilities over the life cycle of the asset and should be reviewed in conjunction with the Vedanta waste management guidance note (GN14)

## 2. Process

### 2.1. Plan

- 2.1.1. Identify, classify and inventorize all waste (mineral and non-mineral) generated from the unit in accordance to local regulations and applicable international standards\*\*.
- 2.1.2. Identify potential environment, health and safety risks and impacts of the waste streams (mineral and non-mineral) over the entire lifecycle of waste management;
- 2.1.3. Develop, implement and maintain a site specific Waste Management Plan as per procedure prescribed in section 4.4 of GN14 with a special focus on a high volume waste (e.g. mineral waste, fly ash etc.) and hazardous waste. The Plan must be approved by site management.
- 2.1.4. Undertake geochemical characterization of the mineral waste and ensure that there is no environmental or human impact due to handling and storage of such waste.
- 2.1.5. Implement the Vedanta - Management of Change procedure in case of any change proposed to the waste management practices and /or raw materials at the unit;
- 2.1.6. Undertake a life cycle impact assessment of any change proposed in the process/technology resulting in waste or waste management practices for the unit;

### 2.2. Implement

- 2.2.1. Segregate, handle, store, transport and dispose of waste in accordance with applicable statutory regulations or good international industry practice\*\*\*, emphasizing:
  - a. Storage and disposal based on the compatibility, reactivity and stability of the wastes.
  - b. Store all hazardous waste separately from non-hazardous waste with display of the hazards, Material Safety Data Sheet (MSDS), emergency measures and proper labelling. Include spill kits, access controls, etc. as needed.
  - c. Provide Secondary containment for liquid waste ( 110 % capacity of the largest storage container or 25 % capacity of overall storage capacity, whichever is greater)

- d. Maintain a Waste Transfer Note for internal/external movement of wastes
- 2.2.2. Ensure that all temporary storage facilities for hazardous wastes are designed and located appropriately to ensure no contamination or human exposure.
- 2.2.3. Develop control measures and emergency response for management of on-site and off-site waste spills (unplanned mixing of waste streams, overflow from the waste containers) and special circumstances (clean-up of spilled material, contaminated soil);
- 2.2.4. Develop mitigation plans for all risk events.
- 2.2.5. Demonstrate implementation of the waste management hierarchy while selecting process and technology for a new or expansion project.
- 2.2.6. Provide waste management training to employees and contractors (including waste vendors) on waste management requirements;

### 2.3. Monitor

- 2.3.1. Undertake independent assessment of all high volume waste storage facilities at the unit covering physical, geotechnical risks to identify hazards, potential mode of failures, associated risk, control measures etc. once in 3 years
- 2.3.2. Undertake an audit of hazardous waste vendors/ hazardous waste management service providers once every 3 years.
- 2.3.3. Undertake a quarterly waste management audit against the requirement of this standard and develop and implement corrective actions.

## 3. Documentation & Record keeping

- 3.1. Waste Characterization and Inventory Details
- 3.2. Risk and Impact assessment findings
- 3.3. Waste Management Plan
- 3.4. Third expert Reports for high volume waste
- 3.5. Emergency response drill records
- 3.6. Internal audit and compliance report.
- 3.7. Waste Transfer Notes and Regulatory Specific Records
- 3.8. Training
- 3.9. Waste Vendor Audit and Closeout records

## 4. Review

Quarterly review of the waste management progress against the set goals and targets.



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\*\* Basel convention/ IFC Performance Standards/ EHS Guidelines/ OGP

\*\*\* Refer IFC General/ Sector Specific Guidelines