

## **Purpose**

The purpose of this document is to standardize Contaminated Site Management practice and strengthen environmental management practices through Preliminary Site Assessment at Vedanta in order to minimize environment related business risks. This document should be reviewed in conjunction with the Vedanta Contaminated Site Management (CSM) guidance note (GN 15). It is applicable to all Vedanta owned and managed operations over the life cycle of the asset (or 'Site').

## **Activities**

The progression of the decision for conducting CSM activities shall be in line with flowcharts and conditions defined in Figure 1. Every business will undertake following process towards identification and management of contaminated sites:

## **Preliminary Assessment**

- Undertake a Preliminary Site Assessment (PSA) annually by a competent Vedanta employee to identify potential environmental concerns based on available information, site interviews and evidence observed at the Site through standardized process. For example, using checklist presented in Annex A1 of GN.
- The Site management shall review PSA findings and undertake corrective actions for improving environmental management systems to mitigate identified current and potential future risks.
- Perform Phase I Environment Site Assessment (ESA) with help of third party environment specialist in-line with decision matrix defined in Figure 1 in case:
  - PSA indicates a requirement of further investigation due to potential of contamination at the site;
  - Any greenfield and/ or Brownfield acquisition/ divestment activity;
  - At a minimum, once every four (4) years.

## **Site Characterization and Risk Assessment**

- Undertake Phase II ESA with help of third party environment specialist and in-line with decision matrix and conditions defined in Figure 1, in case the Phase I ESA identifies the likely presence of contamination
- Undertake a risk assessment using third party environmental specialists in-line with the process defined in the Figure 1 to identify potential source,

pathways and receptors and to establish potential impact.

- Undertake remedial investigation and refine the conceptual model with help of third party environment specialist if risk is established in Phase II ESA.

## **Remediation and Monitoring**

- Establish remediation objectives on the basis of the nature and extent of contamination and risk to the receptors.
- Evaluate available technologies and cost for remediation options.
- Select suitable remediation options based on the remediation criteria effectiveness, site condition, stakeholder considerations, cost implications and time requirements
- Implement, monitor and verify the remediation as per the Remedial Action Plan (RAP).
- Complete remediation measures and verify compliance with defined objectives in consultation with relevant authorities or stakeholders, as required.

## **Documentation**

The following documentation shall be maintained at the site, as relevant.

- PSA Checklist
- Phase I ESA Report
- Phase II ESA Report
- Remedial Investigation Report
- Remediation Action Plan (RAP)
- Remediation Design Report
- Remediation Completion Report

## **Review**

Review outcome of the PSA, Site characterization and remediation exercise at Business and Corporate EXCO.



# VEDANTA CONTAMINATED SITE MANAGEMENT TECHNICAL STANDARDS

