

# **Management Standard – Incident Reporting, Classification and Investigation**

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**Vedanta Resources Plc**

**Sustainability Governance System**

**Management Standard**


**Incident Reporting, Classification and Investigation**

# Management Standard – Incident Reporting, Classification and Investigation

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<b>Standard Title:</b>	<b>Incident Reporting, Classification and Investigation</b>	<b>Date of Revision</b>	13/01/2012
<b>Standard:</b>	VED/CORP/SUST/MS 11	<b>Revision:</b>	

Document Issue and Revision History		
DATE	REVISION NUMBER	CHANGE SUMMARY
18/10/2011	1	Initial draft issue.
13/01/2012	2	Updated to include Classification and Escalation Elements. Renamed from Incident Reporting and Investigation to reflect this update.

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# Management Standard – Incident Reporting, Classification and Investigation

## 1. PURPOSE

The purpose of this Management Standard is to describe the arrangements and requirements for the reporting, classification, escalation and investigation of incidents. The effective, reporting, classification and resulting actions including investigation, closure and communication of incidents, is crucial to enable Vedanta to understand the effectiveness of its risk management programmes and to ensure that the organisation learns lessons so as to be able to avoid future recurrences.

## 2. SCOPE

This Management Standard is mandatory and applies to all Vedanta subsidiaries, operations and managed sites, including new acquisitions, corporate offices and research facilities and to all new and existing employees. This Standard is applicable to the entire operation lifecycle (including exploration and planning, evaluation, operation and closure).

## 3. DEFINITIONS

Definitions of key terms and concepts used in this document are shown in the following table.

Term	Definition
Continual Improvement	A recurring process of enhancing the sustainability governance system in order to achieve improvements in overall sustainability performance consistent with Vedanta Mission, Values and Code of Conduct.
Corrective Action	An action from an audit, assessment or other evaluation that is taken to rectify an actual non-conformance.
Immediate cause	The most obvious reason why an adverse event happens (e.g. employee slips). There may be several immediate causes identified in any one adverse event.
Incident	An event or chain of events which caused or could have caused injury, illness, loss of assets or potential or actual damage to relationships or reputation.
Monthly Incident Report	A monthly report produced by all Vedanta Companies that includes details of all incidents that have occurred in the month. The data for this report is extracted from the Group Incident Management Database & Reporting System.
Investigation	A systematic and structured analysis of an incident and the events and conditions leading up to it, with the aim of (i) identifying the root cause(s) that allowed that incident to occur, and (ii) proposing effective corrective and preventive actions so as to prevent any future recurrences.
Group Incident Management	The electronic database deployed by Group into which all data associated with incidents is stored and can be extracted in the form of

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Term	Definition
Database & Reporting System	various reports; including the Monthly Incident Report
Key Performance Indicator	A specific parameter that provides information about Vedanta's operational and management performance.
Near miss (or "near hit")	An event that, while not causing harm, had the potential to cause injury, ill health, environmental impact or property damage. A near-miss is an incident.
Operation(s)	A location or activity that is operated by a Vedanta Company and is part of the Vedanta Group. Locations could include mines, refineries, port or transportation activities, wind farms, oil and gas development sites, offices including corporate head offices and research and development facilities.
Preventive action	An action from an audit, assessment or other evaluation that is identified and implemented to prevent the reoccurrence of an actual or potential non-conformance.
Root cause	An initiating event or failing from which all other causes or failings arise. This is always related to a management, planning, or organisational weakness or failure. Investigations must strive to identify the root cause, because if they do not then there is a high likelihood of a repeat or similar event occurring in the future.
Stakeholder	Persons or groups that are directly or indirectly affected by a project as well as those that may have interests in a project and/or the ability to influence its outcome, either positively or negatively. This can refer to shareholders, lenders, employees, communities, industry, governments and international third parties.
Top Management	All managers, and their line reports, that report directly to the most senior manager who has ultimate accountability at a Vedanta operation (who may also be a senior manager of one of Vedanta's subsidiary companies). A top management structure may also exist at the subsidiary Company level and Vedanta Group level.
Vedanta Company	A subsidiary of Vedanta Group either fully or majority owned that has its own management structure (e.g. Hindustan Zinc Limited, Vedanta Aluminium Limited, Sterlite Industries Limited, etc.)

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## 4. PROGRAMME REQUIREMENTS

All Vedanta subsidiary companies and operations are required to follow the requirements listed below with regards to incident reporting, classification, escalation and investigation.

### 4.1. General Requirements

Operations shall implement and maintain procedures and other arrangements for the effective, reporting, classification, escalation, investigation, closure and communication of incidents (including near misses).

These requirements also apply to incidents involving contractors (directly commissioned by, or under the direction of, Vedanta) whilst they are on Vedanta premises, or engaged in off-site activities (not on the contractor's own premises).

Where incidents occur on Vedanta operated Joint Venture (JV) sites / premises (e.g. greater than 50% ownership), then incident reporting and subsequent investigations shall be managed in accordance with this Standard or equivalent Standards as defined in any Joint Venture Agreement, where these apply.

It shall be ensured that personnel have the necessary competencies, appropriate to their role in the process (lead investigator/team member), to be able to conduct effective incident investigation and root cause analysis. This shall include formal training where necessary. See also the Vedanta Management Standard MS6 on *Competency, Training and Awareness*.

### 4.2. Initial Incident Actions

- a) Procedures shall include mechanisms to ensure the prompt reporting of incidents.
- b) Procedures shall identify those that are to be informed of an incident:
  - i. An incident shall be reported to the relevant business or site personnel on the same work day on which it occurs (or is discovered).
  - ii. Dependent on the incident classification, Vedanta Group shall be informed of incidents within the time period stated in Section 4.3 below.
- c) In the case of a Category 4 or 5 incident, work shall cease immediately and not be re-started until after the incident has been investigated and risk controls reviewed, that necessary corrective and preventive actions have been taken to reduce risk to an acceptable level, and that formal authorisation to re-start has been given by top management.
- d) Procedures shall ensure that any relevant statutory incident reporting requirements are complied with.

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### 4.3. Incident Classification and Escalation Steps

- a) Incidents shall be categorised according to their actual severity and maximum reasonable consequence, according to the Vedanta Group Incident Classification System (See Appendix 1).
- b) Procedures shall ensure that the following incident escalation steps and recording / reporting actions are addressed.

Incident Category	Description	Incident Escalation Steps	Recording / Reporting Actions
1 & 2	Negligible / Minor	<ul style="list-style-type: none"> <li>Managed locally in accordance with local procedures.</li> </ul>	All incidents recorded in the Group Incident Management Database & Reporting System in line with requirements (See Appendix) and reported monthly in the Incident Monthly Report.
3	Moderate	<ul style="list-style-type: none"> <li>Managed locally in accordance with local procedures</li> <li>Must be reported by email to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel within 24 hours of the incident occurrence.</li> </ul>	
4	Serious	<ul style="list-style-type: none"> <li>Initially managed locally in accordance with local procedures and where applicable using the subsidiary Emergency Plan produced under TS13 Emergency and Crisis Management Technical Standard.</li> <li>Must be reported by email to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel within 12 hours of the incident occurrence.</li> <li>Must be reported to the Vedanta Resources Chief Executive Officer, Chief Sustainability Officer and Legal Counsel within 12 hours of the incident occurrence using – <a href="mailto:IncidentCat4@vedanta.co.in">IncidentCat4@vedanta.co.in</a></li> <li>If additional support is needed then the protocol for calling a “Crisis” will be followed (See the Vedanta Technical Standard TS13 on Emergency and Crisis Management).</li> </ul>	

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Incident Category	Description	Incident Escalation Steps	Recording / Reporting Actions
5	Catastrophic	<ul style="list-style-type: none"> <li>• Initially managed locally using the subsidiary Emergency Plan produced under TS13 Emergency and Crisis Management Technical Standard</li> <li>• Must be reported immediately by verbal communication to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel and then followed by SMS/Email within 12 hours of the incident occurrence.</li> <li>• Must be reported to the Vedanta Resources Chief Executive Officer, Chief Sustainability Officer and Legal Counsel within 12 hours of the incident occurrence using – <a href="mailto:IncidentCat5@vedanta.co.in">IncidentCat5@vedanta.co.in</a></li> <li>• If additional support is needed then the protocol for calling a “Crisis” will be followed (See the Vedanta Technical Standard TS13 on Emergency and Crisis Management).</li> </ul>	
Potential Category 4 & 5 Near Misses	Serious	<ul style="list-style-type: none"> <li>• Managed locally in accordance with local procedures</li> <li>• Must be reported by email to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel within 24 hours of the near hit incident occurrence.</li> <li>• Must be reported to the Vedanta Resources Chief Sustainability Officer and Legal Counsel within 24 hours of the incident occurrence using – <a href="mailto:NearmissAlert@vedanta.co.in">NearmissAlert@vedanta.co.in</a></li> </ul>	

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### 4.4. Investigation

- a) Procedures shall specify the arrangements for the investigation of incidents, including:
  - i. Composition of investigation teams - this will vary depending on the actual/potential consequence of the incident. The investigation team must be comprised of individuals competent to complete the investigation. The local Supervisor(s) would typically be expected to be involved in all incident investigations. Area, line and site management would typically be expected to lead and/or participate in higher category incidents.
  - ii. Roles, responsibilities and authorisation levels.
  - iii. Measures to ensure that legal defences are not compromised during the initial or subsequent management/investigation of an incident.
  - iv. Mechanisms / methodologies / tools (including root cause analysis) to establish immediate, underlying and root causes of incidents, appropriate to the actual/potential consequence of the incident.
  - v. Category 4 and 5 incidents (including Potential Category 4 and 5 Near Misses) shall be investigated using the Vedanta Group defined methodology and tool (including root cause analysis).
  - vi. Reporting timescales and format (note; the formal written report should be produced as fast as is reasonably possible (e.g. in India 7/10 days to meet the Government Factories Department reporting requirements) but in any case within 28 days of the incident unless specific documented reasons prevent this).
- b) Prioritised corrective and preventive actions shall be identified to address the identified immediate, underlying and root causes. These shall be supported by clear responsibilities for completing the actions together with allocated timescales and resources. See also the Vedanta Management Standard MS13 on *Corrective and Preventive Action Management*.
- c) Proposed corrective and preventive actions (including identified control measures) shall be reviewed and approved by senior management. They shall be subject to risk assessment to ensure that (i) they are appropriate to the nature and scale of the hazards and associated risks and (ii) that additional risks are not unwittingly being introduced into the organisation.

### 4.5. Closure

- a) Formal systems shall be in place to ensure that the status of corrective and preventive actions is monitored through to closure.
- b) Confirmation of the effectiveness of corrective and preventive actions shall be undertaken.

### 4.6. Communication

- a) Procedures shall ensure that lessons learned from incident investigations are documented and communicated to relevant Vedanta employees and, where appropriate, contractors.



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- b) Category 4 and 5 incidents (including Category 4 and 5 Near-Hits) shall be communicated across relevant Vedanta companies by Vedanta Group.
- c) Systems shall be in place to manage the external communication of information relating to incidents where this is needed.
- d) Systems shall be in place to review and, where appropriate, act upon incident information received from other Vedanta sites/companies.

### 4.7. Review

- a) The senior management of every Vedanta Company shall undertake and document a periodic (at least annual) review of incident and investigation data to identify any trends, assess the effectiveness of current risk controls, and establish whether any additional measures are necessary. (This may form part of a broader periodic management review).
- b) Incident classification, reporting and investigation procedures shall be periodically reviewed as needed to ensure that they remain current, relevant to the business, effective and in alignment with relevant Vedanta policies and standards.
- c) Vedanta Resources CEO and CSO shall review all Class 5 incidents with the CEO of the Vedanta Company in person or by Telepresence within one month of the completion of the final investigation report.
- d) The report will be submitted to the Subsidiary Company Board of Directors and the Vedanta Resources Sustainability Committee for review.

## 5. ROLES AND RESPONSIBILITIES

Vedanta Resources, subsidiaries, businesses, operations and sites shall ensure that roles and responsibilities for implementing and complying with this Standard are allocated. Key responsibilities shall be included in job descriptions, procedures and/or other appropriate documentation.

## 6. COMPLIANCE AND PERFORMANCE

Each Vedanta operation shall ensure they comply with the requirements of this standard. Performance against meeting the requirements of this Standard shall be assessed periodically, documented and, where required, reported to Vedanta Group. The assessment of performance shall include setting and reporting on key performance indicators (KPIs) where these have been established at Vedanta Group, Company or local level and which meet the requirements as set out in the *Sustainability Data Management Technical Standard*.

The evaluation of performance shall include, as a minimum, confirmation that:

- Incidents are being reported and acted upon.
- Incidents are being correctly classified.
- Investigations are being carried out by competent personnel – including the active involvement of management – using appropriate methodologies.
- Investigations are identifying basic and underlying causes and contributory factors.

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- Corrective and preventive actions, appropriate to the nature of hazards and level of risk, are being identified and implemented.
- The effectiveness of corrective and preventive actions is being assessed.
- Learning arising from incidents are being communicated inside and, where appropriate, outside of the relevant Vedanta Company.
- Senior Management and BOD/Sustainability Committee Reviews have taken place.

### 7. SUPPORTING INFORMATION

Reference	Description
ICMM (International Council of Mining and Metals) – Health & Safety Performance Indicator Definitions	The ICMM have produced a detailed set of H&S indicators and supporting definitions which have been incorporated into the Vedanta Sustainability Governance System and supporting Standards <a href="http://www.icmm.com/health-and-safety-indicators">http://www.icmm.com/health-and-safety-indicators</a>

### 8. REVIEW

This Management Standard shall be periodically audited and reviewed to determine its accuracy and relevance with regard to legislation, education, training and technological changes. In all other circumstances, it shall be reviewed no later than 24 months since the previous review.

### 9. REFERENCES

Doc. Ref.	Title
MS 01	Leadership, Responsibilities and Resources
MS 06	Competency, Training and Awareness
MS 13	Corrective and Preventive Action Management
TS 13	Emergency and Crisis Management

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### APPENDIX 1 - VEDANTA GROUP INCIDENT CLASSIFICATION SYSTEM

Incident Category	Definition	Severity Criteria					Action	Timeline completion action (maximum)			
		Safety (*)	Health (*)	Environment	Social	Labour			Security		
Category 1	Negligible	First Aid Case	N/A	Inside Plant- Toxic/ Hazardous material and volume up to 1m <sup>3</sup> or equivalent vol. of gas emission/ discharge of waste	Complaints - Local complaints in company office (written or verbal) from external sources.	Complaints - Concern / Grievances restricted to local complaints in company office (written or verbal) by Employees / Contractors.	N/A	1. Manage locally in accordance with local procedures.	See Local Procedures		
				Outside Plant - Causing negligible, reversible environmental impact, requiring very minor or no remediation				2. All incidents recorded in the Group Incident Management Database & Reporting System	2 Weeks		
				Complaints - Local complaints in company office (written or verbal) from external sources.				3. Statutory report to authorities (as required by local regulatory agencies)	Statutory Requirement		
								4. Report monthly in the Incident Monthly Report	Monthly		
Category 2	Minor	Medical Treatment Injury	N/A	Inside Plant- Toxic/ Hazardous material and volume up to 1-10m <sup>3</sup> or equivalent vol. of gas emission / discharge of waste	Complaints - Receipt of multiple complaints on same topics from external sources	Complaints - Receipt of multiple complaints on same topics by Employees / Contractors	Robbery or Assault	1. Manage locally in accordance with local procedures.	See Local Procedures		
				Outside Plant 1) Toxic/ Hazardous material and volume up to 1m <sup>3</sup> or equivalent vol. of gas emission/ discharge of waste 2) Causing minor, reversible environmental impact, requiring minor remediation				Protest - Minor protest (single family / small group less than 5 people)	Protest Type - Minor protest (small group less than 5 people)	2. All incidents recorded in the Group Incident Management Database & Reporting System	1 Week
				Complaints - Receipt of multiple complaints on same topics from external sources				Coverage - Minor / adverse local public or media attention	Coverage - Minor / adverse local public or media attention	3. Statutory report to authorities (as required by local regulatory agencies)	Statutory Requirement
										4. Report monthly in the Incident Monthly Report	Monthly
Category 3	Moderate	Restricted Work Injury	New Cases of Occupational illness or disease (inc. Malaria)	Coverage - Minor/adverse local public or media attention	Complaints - Receipt of multiple complaints on same topics from/ to Local NGO/ Govt. body	Complaints - Receipt of complaints /multiple complaints on same topics from/ to Local Union/ Govt. body	Burglary or violent assault	1. Manage locally in accordance with local procedures	See Local Procedures		
				Inside Plant- Toxic/ Hazardous material and volume up to 10-100m <sup>3</sup> or equivalent vol. of gas emission/ discharge of waste				Protest - Small scale demonstration (group including more than 5 and less than 20 people)	Protest Type - Small scale strike (group including more than 5 and less than 20 people)	2. Report by email to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel	24 Hours
				Outside Plant – 1) Toxic/ Hazardous material and volume up to 1-10 m <sup>3</sup> or equivalent vol. of gas emission/ discharge of waste 2) Causes moderate, reversible environmental impact with short-term effect, requiring moderate remediation				Coverage - In Regional media- Newspaper / TV	Coverage – In Regional media- Newspaper / TV	3. Statutory report to authorities (as required by local regulatory agencies)	Statutory Requirement
										4. Report monthly in the Incident Monthly Report	Monthly

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Incident Category	Definition	Severity Criteria					Action	Timeline completion action (maximum)
		Safety (*)	Health (*)	Environment	Social	Labour		
Category 4	Serious	Lost Time Injury / Illness	Complaints - Receipt of multiple complaints on same topics from/ to Local NGO/ Govt. body	Complaints - Receipt of complaints / multiple complaints on same topics from / to National NGO / State Govt. body	Complaints - Receipt of complaints / multiple complaints on same topics from / to National Union/ State Govt. body	Shooting (non-fatal)	1. Manage locally in accordance with local procedures and where applicable using the subsidiary Emergency Plan produced under TS13 Emergency and Crisis Management Technical Standard.	See Local Procedures
							2. Report by email to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel	12 Hours
			Coverage - In Regional media- Newspaper / TV	Protest - Large scale demonstration (group including more than 20 people) - No work stoppage	Protest Type - Large scale strike (group including more than 20 people) - No work stoppage	3. Report to the Vedanta Resources CEO, Chief Sustainability Officer and Group Legal Counsel using – IncidentCat4@vedanta.co.in	12 Hours	
						4. Statutory report to authorities (as required by local regulatory agencies)	Statutory Requirement	
5. Investigate using the Vedanta Resources (Group) defined methodology and tool (including root cause analysis)	Investigation within 28 days							
6. Report monthly in the Incident Monthly Report	Monthly							
		Inside Plant- Toxic/ Hazardous material and volume up to 100-1000m <sup>3</sup> or equivalent vol. of gas emission/ discharge of waste	Coverage - In National media- Newspaper / TV/ Internet	Coverage - In Regional media- Newspaper / TV/ Internet				

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		Safety (*)	Health (*)	Environment	Social	Labour			Security
Category 5	Catastrophic	Fatality / ies		Outside Plant – 1) Toxic/ Hazardous material and volume up to 10-100 m <sup>3</sup> or equivalent vol. of gas emission/ discharge of waste 2) Causing serious environmental impact, with medium-term effect, requiring significant remediation	Complaints - Receipt of complaints / multiple complaints on same topics from/ to International NGO / Central Govt. body	Complaints - Receipt of complaints / multiple complaints on same topics from / to Central Govt. body	Assault – Fatal Direct Terrorist Attack	1. Manage locally in accordance with local procedures and where applicable using the subsidiary Emergency Plan produced under TS13 Emergency and Crisis Management Technical Standard.	See Local Procedures
								2. Report immediately by verbal communication to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel	0 Hours
								3. Report by email/sms to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel	12 Hours
								4. Report to the Vedanta Resources CEO, Chief Sustainability Officer and Legal Counsel using – <a href="mailto:IncidentCat5@vedanta.co.in">IncidentCat5@vedanta.co.in</a>	12 Hours
			Complaints - Receipt of complaints / multiple complaints on same topics from/ to National NGO/ State Govt. body	Protest - Large scale demonstration ( group including more than 20 people) - Stoppage of Work	Protest Type - Large scale strike (group including more than 20 people) - Stoppage of Work		5. Statutory report to authorities (as required by local regulatory agencies)	Statutory Requirement	
			Coverage - In National media- Newspaper / TV / Internet	Coverage - In International media- Newspaper / TV/ Internet	Coverage - In International media- Newspaper / TV/ Internet		6. Investigate using the Vedanta Resources (Group) defined methodology and tool (including root cause analysis)	Investigation within 28 days	
							7. Report monthly in the Incident Monthly Report	Monthly	
Potential Category 4 or 5 Near Miss	Near Miss	See above for Category 4 and 5 Incidents						1. Manage locally in accordance with local procedures	See Local Procedures
								2. Report by email to the Vedanta Company CEO, COO, Head of Sustainability / HSE and Legal Counsel	24 Hours
								3. Report to the Vedanta Resources Chief Sustainability Officer and Legal Counsel using – <a href="mailto:NearmissAlert@vedanta.co.in">NearmissAlert@vedanta.co.in</a>	24 Hours
								4. Statutory report to authorities (as required by local regulatory agencies)	Statutory Requirement
								5. Investigate using the Vedanta Resources (Group) defined methodology and tool (including root cause analysis)	Investigation within 28 days
								6. Report monthly in the Incident Monthly Report	Monthly

Severity Criteria definitions relating to Safety and Health are taken from ICMM (International Council of Mining and Metals) – Health & Safety Performance Indicator Definitions (<http://www.icmm.com/health-and-safety-indicators>)