

ENVIRONMENT HEALTH SAFETY DEPARTMENT

1.0 **OBJECTIVE**:

To define the procedure for the Identification, review and revision of Environmental Aspects their impact, Hazards & their risks, their significance, Control practices and related opportunities.

2.0 SCOPE:

This procedure is applicable for Environmental Aspects, their impact, Hazards and Risks, their significance, Control practices and related opportunities of all departments.

3.0 RESPONSIBILITY:

Officer / Executive - EHS

Officer / Executive — Concern Department

4.0 ACCOUNTABILITY:

Management Representative

5.0 ABBREVIATIONS:

AR Aspect Register

ISO International Organization for Standardization

Ltd Limited

LC Legal Concern

MSDS Material Safety and Data Sheet

No. Number

RPN Risk Priority Number

SOP Standard Operating Procedure

6.0 PROCEDURE:

- **6.1** The process for Aspect / Hazards / opportunities identification shall take into account:
 - **6.1.1** All routine and non-routine activities.
 - **6.1.2** Normal and abnormal operating conditions including startup and shut down operations.
 - **6.1.3** Potential emergency situations.
 - **6.1.4** Activities of all persons having access to workplace including contractors and visitors.
 - **6.1.5** Activities originating outside the organizational premises, yet having possibility of adversely impacting health safety and environment of the unit.
 - **6.1.6** Infrastructure, equipment and materials at workplace provided either by organization or others.



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- **6.1.7** Actual or proposed changes in organization, its activities and materials.
- **6.1.8** Human behavior, capabilities and possibilities of errors.
- **6.1.9** Modifications to the Environment management system, including temporary changes and their impacts on operations, processes and activities.
- **6.1.10** All applicable legal obligations.
- 6.2 Following information sources can act as typical inputs while identifying Aspect / Hazards / opportunities:
 - **6.2.1** General information documents such as brochures, catalogues etc.
 - **6.2.2** Operation Manuals, process flow charts, quality or product plans.
 - **6.2.3** Previous audit reports, Life cycle assessments.
 - **6.2.4** Information from other management systems.
 - **6.2.5** Inventory of toxic substances, published technical data reports.
 - **6.2.6** Applicable legal and other requirements to which organization subscribes.
 - **6.2.7** Codes of practice, national / international policies and guidelines.
 - **6.2.8** Purchasing data.
 - **6.2.9** Product specifications, product data, MSDS, energy and material balancing data.
 - **6.2.10** Waste inventories and categories.
 - **6.2.11** Monitored data reports.
 - **6.2.12** Licenses, Authorizations and consents.
 - **6.2.13** Feedback from interested parties.





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- **6.2.14** Reports of emergency situations and previous incidents.
- **6.2.15** Workplace environmental data.
- 6.3 Use list of Annexure I for numbering registers such as AR.05 for aspect register of Boilers & HR.05 for hazard register of Boilers. One may create extra register and can number them further to the list.
- 6.4 Aspect / Hazard registers to be made in format **Annexure III** by respective functional Heads. Opportunities should be listed out in annexure IV. On the basis of the opportunities concerned department should initiate programs as per SOP of relevant version.
- **6.5** A department should not start more than two Programs at a time.

6.6 REVISION:

- **6.6.1** All aspects / Hazards / opportunities and their evaluation will be reviewed at least once every year.
- All revisions shall cover process modifications, new processes, amended legislative requirements, and improvements made in the activities / products and requirements.

 Aspects / Hazards/ Opportunities will be reviewed whenever necessary for addition, deletion and suitable revision in scores.
- **6.6.3** During revision aspect hazards/ opportunities cannot be deleted except when the activity has been stopped or equipment is removed.

6.7 EVALUATION:

- **6.7.1** Evaluate each impact /risk using the relevant criteria as per **Annexure -II**, and obtain the score for each aspect / hazard.
- **6.7.2** In case any aspect / hazard has been classified as LC it will automatically be a significant aspect and no evaluation is necessary.
- **6.7.3** If the score of RPN is 9 and more it will be considered as significant aspect / hazard.
- 6.7.4 The significant aspects / hazards as finalized above will become the basis for defining the Objectives and Targets as per Procedure SOP.



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7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Area/Equipment Identification No. List	
Annexure-II	Aspect Evaluation Criteria	
Annexure-III	Aspect Register	
Annexure-IV	Opportunity Register	

ENCLOSURE: SOP Training Record

8.0 DISTRIBUTION:

• Controlled Copy No. 01 Quality Assurance

• Controlled Copy No. 02 Environment, Health & Safety

• Controlled Copy No. 03 Quality Control

• Controlled Copy No. 04 Personnel and Administration

• Master Copy Quality Assurance

9.0 **REFERENCES**:

ISO 14001:2015 Environmental Management System.

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By



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STANDARD OPERATING PROCEDURE

Title: Identification Environmental Aspect, Hazards and Opportunities

SOP No.:	Department:	EHS	
SOF No.:	Effective Date:		
Revision No.:	Revision Date:		
Supersede Revision No.:	Page No.:	5 of 9	

ANNEXURE – I AREA/EQUIPMENT IDENTIFICATION NO. LIST

Identification No.	Area / Equipment	Identification No.	Area / Equipment
1.	Production	11	QC Labs
2.	Mechanical Maintenance	12	IT Function
3.	Electrical Maintenance	13	EHS
4.	Civil construction & Project Work	14	General Offices
5.	Boilers	15	Emergency
6.	DM/RO water & Softening plant	16	HEPA Filters
7.	Utility Services	17	Scrubbers
8.	ETP		
9.	Stores		
10.	Storage of hazardous material		



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ANNEXURE – II ASPECT EVALUATION CRITERIA

Safety	Environment	Ranking
Could be fatal/causing property damage > 10 lakhs.	*Offsite Release of a High Toxic material with severe detrimental effect to air/water/land environment. *Onsite release of High Toxic Material with no rectification and containment with severe detrimental effect to air/water/land environment * Ambiant Noise level > 90 db * Onsite Release of a high toxic material with	5
more than 2 persons seriously injured. Needs operation damage > 5 lacs < 1.0 lacs.	immediate rectification and containment with detrimental effect to air/water/land environment *Offsite release of a Medium toxicity material with no containment and rectification with detrimental effect to air/water/land environment *Ambiant Noise level > 80 < 90 db	4
Serious injury/illness Needs hospitalization >1 lac < 5 lacs.	* Onsite Release of a medium toxicity material with no immediate containment and rectification with some detrimental effect to air/water / land environment. * Offsite release of Low Toxicity Material with some detrimental effect to air/water/ land environment * Ambient Noise level >70 < 80 db	3
Offsite medical treatment required. >10,000 < 1 Lac needs medical advice.	* Onsite Release of a medium toxicity material with immediate containment and rectification with no detrimental effect to air/water/land environment. * Onsite Release of a low toxicity material with no containment and rectification with no detrimental effect to air/water/land environment * Ambient Noise level >60 db < 70 db	2
First aid treatment. Damage cost < 10,000 uncomfort.	* Onsite Release of a low toxicity material with an immediate rectification/containment with no detrimental effect to air/water/land environment. * Ambient Noise level < 60 db.	1

SEVERITY (S):



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PROBABILITY OF OCCURANCE (P):

Safety	Environment	Ranking
Incident could happen daily to weekly.	Incidence happens once or more than once a day	5
Incident could happen weekly to monthly.	Incidence happens once a week	4
Incident could happen monthly to yearly	Incidence happens once a month	3
Even may occur only in exception circumstances.	Incidence happens once a year	2
Incidences are unlikely but may occur	Incidences are unlikely but may occur	1



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			A	ANNE SPECT / HA				ΓER			
Plant	:			N: NOR	 RMAL	<u> </u>	AR/H	R:	Team L	eader:	
AREA	A / EQUIP	MENT:		A:ABNORMAL					1embers: GAL CONCI	ERN, S :	
E:EMERGENCY ANY ASPECT FALLING UNDER LC WILL BE AUTOMATICALLY SIGNIFICANT SIGNIFICANT ASPECTS SHALL BE HIGHLITED E:EMERGENCY P: PROBABILITY OF OCCURRENCE RPN: RISK PRIORITY NUMBER											
S.No	Activity	Aspect /	N/A/	Actual /		Ev	aluation	1	Impact /	Causes of	Existing
	Tienviey	Hazard	E	Potential Impact / Risk	LC	S	P	RPN (SxP)	Risk category	significant Impact/risk	Controls for significant impact
REVIS	SION HISTO	ORY - Aspect / I	Hazard I	Register							
Revisi		Date Date		Reason for cha	nge		Origi	nator (L	eader)	Appro	val
Plant/Functional Manager Plant/ Functional Head Distribution: Leader /plant/functional Head(s) /Functional Head – EHS					onal Head						
	Distribution. Deader /plant/functional fread(8)/Functional fread – Efficiency										



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ANNEXURE – IV OPPORTUNITY REGISTER

S.No.	Area	Activity	Opportunity	Management Program Running		Date of Last review	Status
				Start Date	Completion date		