

1.0 PURPOSE: To describe a procedure to identify the environmental aspects arising from activities, products and services and determine those which have or can have significant impact on environment.

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2.0 SCOPE: This procedure is applicable for the environmental aspects of activities, product and services under control and influence of SHAKTI PUMPS (INDIA) LIMITED. PITHAMPUR, DHAR.

3.0 REFERENCE: #ISO 14001:2015 Environment Management System.

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4.0 RESPONSIBILITY: #All HOD's are responsible for the Identification and updating the environmental aspects and evaluation the significance arising out of activities performed in their work area.

5.0 REQUIREMENTS:

5.1 Legal Requirement

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6.0 PROCEDURE:

6.1 Identification of environmental aspects and impacts is done by a team / HOD through

- On sight visits
- Manufacturing flow diagrams
- Interviews
- Applicable environmental Legislation
- Interested parties' concerns (i.e. Neighbors, contractors, visitors and suppliers)

6.2 Identification and evaluation of environmental aspects-impacts shall be documented in aspect impact analysis sheet format no. QF-MR-10

6.3 Fill out the Checklist for Aspect – Impact Preparation (CL-EHS-01) at the time review.

6.4 Three categories of aspects considering situation like normal, abnormal and emergency.

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Explanation: -

Normal: - Is a situation which does not have any relation to condition like abnormal, emergency and legal concern.

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Abnormal: - Is a situation related with and kind of environmental pollution and depletion of resource by default.

Emergency Situation: - Is a situation which has potential to lead to an environmental emergency / accident i.e. fire which may lead to air pollution, spillage of hazardous chemical / waste in large quantity which may affect the environment.

6.4 Identify as many as possible the actual and / or potential, positive or negative environmental impacts associated with each identified aspect and categorized them as per following guidelines.

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- Air Pollution (AP) : Generation of fumes, smoke, dust and bad odor.
- Water Pollution (WP) : Water contaminated due to oil, grease, chemicals and effluent generated from manufacturing process and sewage.
- Noise Pollution (NP) : Ambient noise shall not exceed 75 DB at day time and 70 DB in night due to process or machine.
- Land Contamination (LC) : Contamination of land due to spillage of oil, waste slurry, spillage of sludge, hazardous chemical on land.
- Resource Depletion (RD) : Use / wastage of process chemicals, oils, coolant, water, compressed air, energy and fuel.
- Work Environment : Spillage or leakage of water and oils on the floor, dust, dirt, paper, plastic, cotton waste and metal chips on floor, slippery conditions and heat generation.
- Solid Waste Generation (SWG) : Generation of metal waste, paper, plastic, glass, dust, dirt, cotton and wooden waste.

6.5 The significance of documented aspect-impact shall be evaluated based on overriding criteria and impact rating.

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6.6 **Overriding criteria:** - If the environmental impact of any aspect happens to be (falls in) overriding criteria, it is directly treated as significant without further impact rating.

The following impacts are considered as overriding criteria.

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(a) The impacts which are controlled by legal and other requirements should be considered as legal concerned.

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(b) Inserted party concerned (IPC) which are identified through survey of staff, employees, suppliers, customers and contractors.

(c) Emergency Situation: - Is a situation which has potential to lead to an environmental emergency / accident i.e. fire which may lead to air pollution, spillage of hazardous chemical / waste in large quantity which may affect the environment.

6.7 **Impact Rating:** - Impact not following in overriding criteria is rated as per following guidelines.

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Measure	Pollution	
Scale (S1)	Work Place or low	1
	Section or department	2
	Zone or building	3
	Inside Plant Boundary	4

	Beyond Plant Boundary	5
Severity (S2)	Negligible visual impact	1
	Resource Depletion	2
	Affects flora and fauna or global issue	3
	Fatal to human life on large scale	4
Probability (P)	At least once a year	1
	At least once a month	2
	At least once a week	3
	At least once a day or continuous	4
Detection (D)	Immediately	1
	Within 1 hour	2
	Within 8 hours	3
	Within 24 hours	4
	More than 24 hours	5

If the product of $S1 \times S2 \times P \times D$ is equal to or more than 16 impact is considered as significant with ongoing improvement in environmental performance $S1 \times S2 \times P \times D$ will be revised to lower value in order to consider other impacts as significant.

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6.8 Concerned department shall review and update their aspect-impact analysis in case of any change in the process, layouts, materials, acquisition or modification in equipment.

6.9 The aspect-impact analysis also reviewed after effective implementation of Environmental Management Program.

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6.10 The aspect-impact shall be reviewed comprehensively once in a year by all departments with Checklist for Aspect – Impact Preparation CL-EHS-01.

7.0 MONITORING/MEASUREMENT:#

7.1 Monitoring of controls.

7.2 Number of changes in Aspect Impact document and coverage of all activities.

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8.0 RECORDS: #

8.1 Aspect-Impact Analysis

QF-MR-10

8.2 Checklist for Aspect – Impact Preparation CL-EHS-01