1.0 PURPOSE:

To establish, implement & maintain a procedure for identification of environmental aspects of activities, products and services covered under the scope of EOHS Management system and to evaluate the environmental aspects and further determine significant impacts on the environment.

2.0 SCOPE:

Applicable for the activities, process, products & services covered under the scope of EOHS Management System.

3.0 RESPONSIBILITY:

EOHS MR& Cross Functional Team

4.0 DEFINITION

4.1 Aspect: Element of organization's activities, process, products and services that can interact with the environment.

4.2 Impact: Any change to the environment, whether adverse or beneficial, wholly or partially resulting from the organization's activities, process, products and services.

5.0 PROCEDURE - DETAILS:

5.1 EOHS MR shall identify the CFT Members (EOHS-ML-12) from all departments for effective implementation of EOHS Management System. List of CFT members shall be approved by CEO.

5.2 CFT conducts overall process of identifying environmental aspects & impacts.

5.3 CFT conduct an Initial Environmental review considering the following:
   ♦ Identification of legal requirements
   ♦ Emission to air
   ♦ Discharge to water
   ♦ Waste management practices.
   ♦ Existing procedure dealing with contractual activities etc.,

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5.4 During the study, all the areas / departments under KFL premises are covered and due consideration given to emergency situations.

5.5 CFT shall identify the environmental aspects & impacts associated with the activities, processes, products and services of KFL including planned / new developments / new or modified activities, process, products and services. The Environmental Aspects shall be identified such that over which KFL can exercise direct control or it can have influence.

When determining controls, or considering changes to existing controls, consideration shall be given to reducing the risk according to following hierarchy:

a) Elimination
b) Substitution
c) Engineering controls
d) Signage/Warnings and/or administrative controls
e) Personal Protective Equipments

5.5.1 Identifying activities, processes, products and services:

a. Activities: The first step is to categorize activities, processes, products & services of KFL. The activities, processes, product & services at KFL premises are identified in each dept. There can be more than one aspect for each activity and an aspect can have as its source more than one activity.

b. Products: The product is the outcome of the processes and or operations which may or may not have impact on Environment. Thus the processes / operations directly related to the manufacture of Forgings and Heat Treatment of forgings will be considered to identify the related environmental aspects & impacts.

c. Services: Services have been classified into the categories listed below:

1. Services provided by KFL such as Maintenance - Air compressors, DG, water supply, Fuel handling, Canteen and communication etc.,
2. Services obtained from outside agency: AC Maintenance & DG Maintenance etc.,

5.5.2 Identifying Environmental Aspects & Impacts: The second step is to identify the aspects associated with the identified activities, process, product & services. Aspects/Impacts associated with activities, process, product & services shall be identified considering impacts and output associated with operations giving due consideration to normal, abnormal operating conditions, start up & shutdown as well as foreseeable emergency situations.

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Aspects are also identified where KFL established direct control & over which it can have an influence. The aspects are identified in the following classes:

1. Discharge to water
2. Emissions to air (including noise)
3. Spillage of all types of oils
4. Waste management practices
5. Noise pollution from DG sets and Forging Presses
6. Hazardous waste management.
7. Energy consumption
8. Material use/consumption
9. Recycling and re-use
10. Emergency situation during all activities etc.,

<table>
<thead>
<tr>
<th>SCORE</th>
<th>SCALE (IMPACT AREA)</th>
<th>SEVERITY (Quantum)</th>
<th>DURATION (HEALTH IMPACT)</th>
<th>DETECTION (PERIOD)</th>
<th>PROBABILITY (OF OCCURANCE)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>The immediate person</td>
<td>Negligible</td>
<td>Momentary</td>
<td>Immediate</td>
<td>Accidental</td>
</tr>
<tr>
<td>2</td>
<td>Concern department</td>
<td>Minor</td>
<td>One day</td>
<td>Daily</td>
<td>Occasional</td>
</tr>
<tr>
<td>3</td>
<td>Factory / unit</td>
<td>Moderate</td>
<td>One week</td>
<td>Weekly</td>
<td>Periodically</td>
</tr>
<tr>
<td>4</td>
<td>Neighborhood</td>
<td>Major</td>
<td>Month/ year</td>
<td>Periodically</td>
<td>Regular</td>
</tr>
<tr>
<td>5</td>
<td>Beyond neighborhood</td>
<td>Excessive</td>
<td>Life long</td>
<td>Not detectable</td>
<td>Continuous</td>
</tr>
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</table>

Total score for any aspects shall be the multiplication of individual score of scale, severity, duration, detection and probability of the same aspect.

Significant aspects are those activities that will score above average of the total score or any overriding criteria.

Legal concerns and interested party concern considered as overriding criteria and should be considered as Significant.

Guidelines for considering overriding criteria are as follows:

a) Legal Concern: All legal concerns as identified in Legal Register (EOHS-RG-01).

b) Interested Party Concern: All concerns which affects the interested parties such as operators and others affected by the aspect.

Non Significant aspects are those activities that will score below the average of total score.

Overriding criteria for determining significant aspects shall be any one of the following criteria’s like legal concern, interested party concern.

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Operational control (i.e. work instruction) shall be implemented for all significant aspects

Scale: - An Impact area in neighborhood or beyond neighborhood is as per assumption,

Severity: - These are the Quantum of adverse impact on the environment by the activity, processes of the organization.

Duration: - Time period for which the impact will be active on human being, animal, flora, fauna etc.

Detection: - It’s the Time required for the aspect to be detected.

Probability: - It’s the chances of Occurrence of the aspect –
- Accidental = by accidentally.
- Occasional = Once per year.
- Periodically = Once per month.
- Regular = Once per week.
- Continues = At least Once per day or daily.

Assumptions:-
1> Scale of impacts are in neighborhood or beyond neighborhood.
2> Health impacts may sustain for the year or life long.
3> Time period of detecting the aspects may be periodical or may not be detectable at all.
4> Probability of occurrences may be accidental.
5> Components may fall down on shop floor during handling.
6> Oils may spill on floor during handling.
7> Residual oils may spill or contaminate water / land during disposal of empty drums.
8> Drinking waters may not be pure or safe for drinking.
9> Smoke of tempering furnace or press may pollute work place environment
10> Incoming vehicles may create air pollution.
11> Volume of aspect should be considered based on experience
5.6 **Review of SIS:**

Any new aspects identified are rated for finding significant impact. In the significant impact study, the rating allocated may be re-rated annually to know the effectiveness of implementation of the system. In case of any change in rating guideline, the rating of all aspects is conducted for the revised criteria in the guideline. The latest list of significant impacts is maintained in each department. The change to documents is made as per document control procedure.

6.0 **Document/Record Ref:**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Document/Record Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>List of CFT Members</td>
<td>EOHS-ML-12</td>
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<td>2.</td>
<td>List of General Waste and Hazardous Waste</td>
<td>EOHS-ML-11</td>
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<td>3.</td>
<td>Aspect &amp; Impact Register</td>
<td>EOHS-RG-02</td>
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<td>4.</td>
<td>Master list of Significant Aspects</td>
<td>EOHS-ML-07</td>
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<td>5.</td>
<td>Legal Register</td>
<td>EOHS-RG-01</td>
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7.0 **ISO Ref:**

Clause ref 4.3.1 of ISO 14001:2004