

**Check List Elements EHS Management (To Third Party)**  
**JNCASR**

Check List Elements	Complied /Yes or No	Responsibility	Remarks
<b>Policy, Organisation and Management</b>			
<b>Communication of Policy:</b>			
EHS policy Has to be prepared , approved by the top management and printed in in English and also a language understood by majority of employees including service provider's employees to be displayed at conspicuous places in the unit.	sci		
Copies of EHS Policy to be made available and explained to all			
employees including service providers, apprentices, transport workers, etc.			
<b>Organisation set up:</b>			
Unit to have adequate organizational structure to ensure compliance to :			
a. EHS standards.			
b. Responsibilities of the Unit Head, Heads of the Departments, EHS Manager/ Coordinator, fire coordinator, managers responsible for energy, water and waste management & radiation safety, EHS Committee members & managers responsible for tracking legislation, etc. to be issued in writing and signed acceptance obtained.			
<b>EHS Committees :</b>			
EHS Committees are required to promote active participation of employees and service providers in EHS management. It is good to have equal number of member representation from workers (own as well as service providers) & management.			
Suggested organisation of the committee			
Plant Head to be appointed as the Chairman.			
All Scientists/Engineers to be members of the Committee.			
EHS manager/in charge to act as the Member Secretary.			

At least two members from work force			
The frequency of meetings should be at least once in a month			
All meetings must have an agenda & the minutes to include review of pending points, action plan, responsibilities and target date, accidents & review of corrective & preventive measures, in addition to current observations.			
<b>Objectives &amp; Management Programmes:</b>			
EHS objectives should be incorporated in the beginning of every year , Preferably in the first meeting of the year and also achievement against the objective of the previous year required to be reviewed in the same meeting .			
<b>Procurement &amp; Installation of New Plant/Equipment:</b>			
EHS requirements specific to the unit (guarding & interlocking,			
noise/ dust levels, electrical safety, etc.) to be specified in all purchase orders for machinery/equipment/facilities, whether new or rebuilt). Also all equipment orders to specify conformance to relevant national / international standards and codes.			
Unit to ensure that all machinery / equipment/ facilities (especially			
first time procurements from a supplier or new types from the same			
supplier) are inspected before receipt /installation / commissioning to meet EHS standards. This must be certified by a responsible Engineer/Scientist.			
Operator & maintenance crew to be trained in proper and safe operation/maintenance.			
<b>Management Review</b>			
Plant head and EHS representative of JNCASR should inspect the plant periodically for EHS purpose. The Plant Head's periodic site inspection agenda should include			
housekeeping, hygiene, storage practices, control over service providers etc.			

Unit to analyse the site inspection observations and take corrective and preventive actions and could form an input for Unit's action plan for EHS performance improvement. This should include			
▪ EHS objectives & management programs			
▪ Legal compliance			
▪ External complaints on EHS issues, if any			
▪ Implementation of corrective actions on inspections/ audits			
▪ Accidents investigations & effectiveness of corrective and preventive measures			
▪ Learning's from accident case studies received from Corp EHS etc.			
▪ EHS Suggestion scheme			
▪ Incident reporting and analysis			
<b>Training, Development &amp; Awareness:</b>			
<b>Training need identification and implementation</b>			
EHS training needs of all employees including employees of service providers should be systematically identified and documented on annual basis. Annual training plan based on the training need identification to be prepared and reviewed regularly. (Assessment of effectiveness of training provided in the last year should also be used for identification of training needs).			

Training should include basic EHS (site specific) and job specific training based on roles and responsibilities of individuals. Employees working with hazardous equipment (e.g. Handling of gas cylinders, operation of the reactor , operation and storage of the Final product (Methanol) etc.) or in high risk areas (e.g. working with chemicals, insecticides, confined spaces, work at height, high pressure / high temperature vessels, etc.) to receive specific EHS training relevant to the hazards.			
Consolidated training records showing training planned, type and			
duration of training provided along with number of employees			
covered and plan for covering the balance to be maintained by the unit. This should include the training history of each employee including service providers' employees for the last 3 years.			
<b>Regular briefing / Tool box talk:</b>			
Unit should have a system of regular briefing or tool box talk (at least once a week/ month) in each area of operation and ensure that all employees working in respective area (including service provider's employees) attend these meetings. Records of such tool box meetings should be maintained.			
<b>Risk Management</b>			
<b>Buildings/ Structural:</b>			
Unit to carry out physical inspection and/ or comprehensive detailed study / review of buildings & structures to assess the safety of the building from general and seismic stability . A certificate confirming the stability of the buildings/ structures for the revised zoning should be obtained, from the concerned authority or any expert as deemed fit by the EHS committee of the JNCASR.			
Unit to implement all corrective measures for deficiencies based on			
the above within a reasonable time			
<b>Electrical:</b>			

All electrical systems including lightning protection (once every 2 years or whenever major modifications are implemented ) .			
<b>Fire &amp; Life Safety:</b>			
Unit to have risk assessment of all fire & life safety systems (once every 3 years or whenever major modifications are implemented			
All corrective measures recommended by the above risk assessment should be implemented within a reasonable time.			
<b>General Risk Management</b>			
Risk assessment is a continual process requiring active involvement of EHS experts as well as the persons carrying out and directly responsible for the activity. Unit should target known significant risk areas and activities on priority and progressively extend coverage, throughout ensuring quality and ownership of the process.			
<ul style="list-style-type: none"> <li>• The risk assessment team must include employees</li> </ul>			
(including service provider's employee) of the specified area.			
<ul style="list-style-type: none"> <li>• Based on the risk assessment, mitigation plans, including</li> </ul>			
Safe Work Procedures, where required, must be developed.			
<ul style="list-style-type: none"> <li>• Risk assessment of an activity/process to be revisited after occurrence of an accident.</li> </ul>			
<ul style="list-style-type: none"> <li>• Risk assessment must also cover non routine activities such as cleaning, maintenance, etc. as appropriate</li> </ul>			
<ul style="list-style-type: none"> <li>• The number of comprehensive and inclusive risk assessments carried out is a leading EHS indicator</li> </ul>			
<b>Safe Work Procedures:</b>			
Written instructions on the safety precautions & key steps to be followed while carrying out any activity,			

Unit to have “Safe Work Procedures” SOP displayed at each area of operation for all activities having significant risks (Displayed in both English & local languages.)			
<b>Work Permits :</b> <i>(A work permit is basically a document permitting work to be carried out in areas or locations that are inherently dangerous and require additional safety precautions e.g. hot work, electrical work, work at height, work in confined space</i>			
Work permit system to be instituted for all inherently dangerous jobs including hot work, electrical work, work at height, confined space work, excavation.			
Validity for a specified task and task period to be defined. In case of continuous work, the work permit is to be revalidated every day.			
Unit should nominate a person to issue work permit with an alternative person during absence of the person nominated and permits are to be issued only by the persons nominated for the purpose.			
<b>Tracking of Legislation: All EHS related statutes, model rules &amp; are to be tracked and implemented as and when there is a change or amendment.</b>			
Unit to have designated Manager(s) to identify, track and implement all national / state & especially local requirements in addition to implementing all the new national amendments			
<b>Plant Inspection:</b> <i>Quarterly safety inspections focusing on issues</i>			
<i>such as housekeeping &amp; hygiene issues, storage practices,</i>			
<i>contractor safety, electrical, etc., to identify any deviations from established safe practices.</i>			
Unit to have schedule for quarterly inspections of each area with the name of person(s) to carry out the plant inspection with specific focus on issues as mentioned above.			

<b>Audits &amp; Control:</b>			
<b>Audit s and controls should be put in place . Audits can be a periodical or surprise or both .</b>			
<b>Accidents and incident reporting</b>			
<b>Property Damage Accident:</b>			
<b>Report of “Dangerous Occurrence” (Including fires &amp; Environmental releases):</b>			
<b>Investigation and review:</b>			
<b>Investigation:</b>			
<b>Near Miss Reporting, Investigation &amp; Control:</b>			
<b>Signature by vendor :</b>	<b>Signature by JNCASR Officials/Assesor:</b>		
<b>Signature of Authorized authority JNCASR:</b>			