

Environmental nonconformity, corrective & preventive action
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1.0 Purpose

The purposes of this procedure is to define a system for,

- a) To establish compliance with regulations and requirements of EMS policies,
- b) Handling and investigation of incidents; mitigation of consequences of incidents,
- c) To maintain records for analyzing the data related to nonconformities, incidents and to initiate appropriate corrective and preventive actions.
- d) To take appropriate corrective and preventive action

2.0 Scope

Applicable to all areas, activities and operations carried out by KSPH&IDCL, including activities carried out by suppliers' contract personnel.

3.0 Associated and reference documents

- a) ISO 14001:2004 clause 4.5.3
- b) IMSP 21 - Operational Control
- c) IMSP 26 - IMS Internal audit
- d) IMSP 27 - Corrective and preventive action
- e) IMSP 28 - Management review

4.0 Definitions

- a) **Nonconformity** (ISO 14001:2004): Non-fulfillment of a requirement.
- b) **Correction**: Action taken to eliminate a detected nonconformity (mitigating an identified nonconformity)
- c) **Corrective action**: Action to eliminate the cause of a detected nonconformity or other undesirable situation (i.e., action taken to prevent recurrence)
- d) **Preventive action**: Action taken to eliminate the cause of a potential nonconformity or other undesirable situation (i.e., action taken to prevent occurrence)

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5.0 Responsibility

Responsibility is described in the procedural part.

6.0 Procedures

6.1 Operational Nonconformities

Nonconformities with regard to EMS system implementation are

- a) Deviation from operational control / system procedures, and
- b) Deviation from EMS Management Programs

The above nonconformities may get identified through

- a) Monitoring and measurement of key characteristics of EMS elements,
- b) Internal audits,
- c) Review of emergency preparedness and response,
- d) Complaints received from interested parties, and
- e) Management review

6.1.1 Nonconformities identified through monitoring and measurement

Whenever nonconformities are identified through monitoring and measurement, the personnel responsible for the monitoring and measurement of a key characteristic should immediately inform it to the concerned Head of dept.

Examples:

- 1) If smoke emissions from DG set found to be abnormal, it should be informed to the Head of Administration / Site in charge who in turn will take up the issue with concerned contractor for its repair/maintenance.
- 2) It may be observed during inspection of fire safety control that a particular fire extinguisher found to be damaged / unfit for use; it should be reported to location /area head as well as EMR.

6.1.2 Nonconformities identified through internal audits

Nonconformities identified through internal audits are reported through either NC Report or Audit Observation sheet. In either case, it is the responsibility of the respective auditee /respective HOD to take immediate action to mitigate the nonconformity. Further, corrective

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and preventive action may be initiated in accordance with procedure EMSP 14 - Corrective and preventive action.

6.1.3 Nonconformities identified through review of emergency preparedness and response

Mock drills are conducted for the identified emergencies as per defined response plan (see EMSP 06); response to an actual emergency is also done as per defined response plan. In both the cases, there is a possibility of some nonconformities gets identified. It can be ineffectiveness of the response plan or deficiency in the plan to mitigate the effects in a timely manner. Whenever such nonconformities are identified, the emergency response team shall report it to EMR who in turn review the causes of nonconformity and initiate appropriate action (Revising the emergency response plan, re-training the team members, improving the techniques / methods used).

6.1.4 Nonconformities identified through complaints received from interested parties

Whenever complaints are received from interested parties, the same should be reported to EMR. Most of the time, such complaints may be traceable to a legal requirement or a significant environmental aspect. EMR shall review the complaints and initiate appropriate actions to mitigate the problem as well as taking action to prevent their recurrences. In certain circumstances, it may have to be discussed in MRM.

6.1.5 Nonconformities identified through management review

Whenever nonconformities are identified though management review, the review committee shall ensure that such nonconformities are appropriately resolved, and necessary directions are provided for the executive management members on how similar issues in other operational areas have to be dealt with. EMR shall ensure that required communication takes place in this regard. Following are the typical nonconformities that may get identified in the management review:

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- a) Supplier's / Contractor's EMS performance not up to the expectations of KSPH&IDCL
- b) EMS management program has observed some lapses;
- c) Internal audit were not effective [to prevent the types of nonconformities reported during third party (certification body) audits];
- d) Induction training given to new employees not effective

6.2 Incident management

6.2.1 Environmental incident

Where the result of an incident / accident has an impact on the Environment (e.g. chemical spills enters storm drain that has the potential to cause water pollution). In such cases, prescribed operational control procedure should be followed. In the absence of such procedure, the operational personnel shall seek advice from EMR.

6.3 Analysis of data

Coordinator(s) shall compile the data related to EMS nonconformities, incidents and analyze to determine those requiring action or those that can be prevented or if the severity of impact could be reduced. This information shall be forwarded to the MR for taking up the issue in the Management review .

7.0 Corrective and preventive action

Nonconformity is non-fulfillment of a requirement. A requirement may be stated in relation to the management system or in terms of environmental performance. Situation may occur where part of the system may not function as intended or environmental performance requirements are not met. System for corrective and preventive action is described in two stages. This procedure addresses all types of nonconformities including, but not limited to,

- a) Results of audits.
- b) Inputs obtained from measurement & monitoring.
- c) Regulatory non-compliances and incidents and accidents

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- d) Non-conformances with internal objectives and targets
- e) Insufficient documentation to evaluate conformance with EMS
- f) Non-conformances with respect to existing policies and procedures.

7.1 Corrective action

7.1.1 Below mentioned table details the type of nonconformity, source for its identification, and the mitigation action recommended. Criterion for taking corrective action is described in the subsequent paragraphs.

Sl. No.	Type of nonconformity (NC)	Source for the identification and reporting of NC	Mitigation action
1	Documentation inadequacy to achieve policy and objectives, and to fulfill standards requirements	Audit – adequacy audit	Review and revision of identified document
2	Responsibilities not defined for a system activity	Document review – part of audit	Review and revision of identified document
3	Pertinent operational document not available at the point of use	Audit	Ensure its availability
4	Non-compliance with EMS Legal requirement which was not identified	External Communication	Update legal register; establish compliance
5	Legal and other requirements not complied with	Evaluation of compliance	Establish compliance for the reported finding
6	Operational control not effective to achieve planned results	Management review inputs (related to process performance)	Review and ensure established operational controls are adequate; personnel are competent.
7	Objectives and targets not achieved	Management review inputs; Audit	As decided in the MRM

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Sl. No.	Type of nonconformity (NC)	Source for the identification and reporting of NC	Mitigation action
8	Emergency response not effective	Emergency response report	Revise Emergency response procedures; train personnel
9	Internal audits are not effective	External audit	Review by top management and implement the actions proposed
10	Incident occurred is related to an unidentified aspect.	Internal communication	Implement operational controls; update aspect-impact.

6.1.2 Criterion for initiating corrective action

A corrective action is always preceded by cause analysis. Cause analysis may not be feasible for all the identified / reported nonconformity. Following criteria shall be applied for various steps of corrective action.

Sl. No.	Corrective action steps	Criterion for initiating the corrective action step
1	Reviewing nonconformities (NC) for initiating corrective action.	<ul style="list-style-type: none"> • If it is a major nonconformity; • It is a minor NC being recurred more than 3 times • If it is related to achievement of objective and targets or a legal concern
2	Determining the causes of nonconformities	<ol style="list-style-type: none"> 1) If it is a major nonconformity; 2) It is a minor NC being recurred more than 3 times 3) If it is related to achievement of objective and targets or a legal concern
3	Evaluating the need for action to ensure that nonconformities do not recur	<ul style="list-style-type: none"> ○ If the NC is related to a critical legal requirement (subject for penalization) ○ If it is affecting the business performance considerably

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Sl. No.	Corrective action steps	Criterion for initiating the corrective action step
4	Determining and implementing action needed	<ul style="list-style-type: none"> ▪ If the NC is related to a critical legal requirement (subject for penalization) ▪ If it is affecting the business performance considerably ▪ Financial viability of the proposed action as compared to consequences of taking no action
5	Maintaining records of the results of action taken	Mandatory for all CA taken
6	Reviewing corrective action taken	Mandatory for all CA taken; to be carried out during subsequent internal audit

Once it is determined to complete the corrective action process, concerned process owner / functional head shall carryout the root-cause analysis, and further complete the corrective action process steps detailed above. Generally the root-cause of nonconformity will be one or more of the following:

- a) Personnel – competence, awareness and training
- b) Resources - deficient resources / constraints in resources provided
- c) Policies and procedures – deficient / inadequate / inconsistent with organization’s overall policy

7.2 Preventive action

Elements for which a preventive action can be implemented are similar to those described under corrective action. One or more of the following means can be utilized to identify opportunity for preventive action:

- a) Trend analysis of element (of EMS system) wise nonconformities;
- b) Trends in “no loss incidents”
- c) Periodic inspection / “walk-through”
- d) Suggestion from employees
- e) Audit recommendations

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Root-cause analysis shall be carried out for the identified / reported potential nonconformity. Preventive actions proposed for an identified / reported potential nonconformity shall be reviewed in the management review meetings or by the EMR for techno-commercial viability. The respective functional heads shall implement those that are approved. Records of the results of action taken shall be maintained.

8.0 Records

Sl. No	Name of the Record	Custodian	Retention Period
1	Summary of incidents / accidents.	Coordinator	3 Years
2	Corrective/Preventive action report	Concerned functional head; copy shall be given to MR	3 Years

Approved by : Managing Director
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