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## CONDUCTING AN ENVIRONMENTAL AUDIT

An environmental audit is typically undertaken in three phases:

- Pre-audit
- On-site audit
- Post-audit

Each of these phases comprises a number of clearly defined Objectives, with each objective to be achieved through specific Actions, and these actions yielding results in the form of Outputs at the end of each phase.

### A Pre-Audit Activities

#### Objectives

- To develop an audit plan for the on-site activities
- To make the necessary preparation and arrangements for the on-site audit



#### Actions

##### 1. Develop an Audit Plan

The Audit Plan should address:

- Where: audit site & boundary with overview
- What: scope & objectives
- How: site personnel interview, site inspection, audit protocols; site logistics and administrative arrangement
- Who: audit team and site facilitation arrangement
- When: audit schedule and milestones

The Audit Team is subsequently to:

- Seek agreement from AMC on audit plan
- Establish the reporting structure



#### Tips & Hints

*Audit logistics and administrative details such as confirming arrangements and schedules, receipt and follow-up of information can be time consuming. Designation of an Audit Team member to oversee such details is strongly suggested. Never ignore or underestimate the audit preparation and its logistics.*



#### Tips & Hints

*The same 5Ws principle will surface in different forms through out the environmental audit process.*

## 2. Prepare Pre-Audit Questionnaire

To prepare questionnaire and document checklists on:

The "hard" issues:

- Overall environmental management
- Procurement policy
- Energy management
- Materials management
- Water and wastewater management
- Waste management
- Noise monitoring and control
- Air quality monitoring and control
- Emergency response procedures

The "soft" issues:

- Transportation and travelling
- Staff awareness and training
- Publicity of environmental information
- Response to public enquiries and complaints

The questionnaire and checklists are to be forwarded to the relevant site personnel for completion.

## 3. Review Background Information

To gain familiarity with audit site through review of:

- Site layout plan(s)
- Site history, use and activities
- Blue prints/as built drawings
- Organisational structure at audit site(s)
- Internal environmental policies, procedures and guidelines



### Resource

*Examples of pre-audit questionnaires and operational document checklists are given in PAQ 1-28 and ODC 1-21.*

## 4. Review Operational Information

To gain appreciation of site activities and operational practices on site through review of:

- Operational activities and process descriptions
- Management system policies, procedures and program documentation
- Relevant records (compliance, monitoring, training, maintenance, calibration etc.)
- Other relevant information pertaining to environmental management practices

## 5. Conduct Initial Site Visit

To arrange with the site facilitator(s) for an initial visit during normal operation of audit site to:

- Meet with officer-in-charge to explain purpose of audit
- Assess whether background information gathered is up to date and accurate
- Follow-up on the list of preliminary audit impressions
- Identify and request additional site information as necessary
- Confirm thoroughness of audit scope
- Establish adequacy of resources for audit

## 6. Develop On-Site Questionnaire and Audit Protocols

To develop a series of step-by-step questions and evaluation criteria to assess:

- Compliance with pertinent legislative and regulatory requirements
- Conformance with internal environmental policies, procedures and guidelines
- Status of current environmental practices
- Staff awareness of internal environmental policies, procedures and guidelines



### Tips & Hints

*The Audit Team may find it helpful to draw up a list of issues to be clarified during the initial site visit.*



### Resource

*Examples of on-site audit protocols are provided in:*

*APCI-3 (Air Pollution Control),  
OLP1 (Ozone Layer Protection),  
WPCI-2 (Water Pollution Control),  
NCI-2 (Noise Control),  
CWM1-7  
(Chemical Waste Management),  
DGMI-18  
(Dangerous Goods Management).  
and  
EIA-1  
(Environmental Impact Assessment).*

### 7. Review Audit Plan and Arrange Logistics

All documents and arrangements should be updated or revised to reflect current knowledge and conditions.

Key points to review include:

- Audit scope
- Audit schedule
- Audit protocols
- Allocated resources



#### *Proceed With Caution*

*The Audit Team Leader should ensure that all items identified are completed and the Audit Plan agreed by the AMC before commencing to the next phase.*

### *Output*

- Audit Plan
- Package of background information
- Completed Operational Information Questionnaire and Audit Checklists
- On-site Questionnaire and Audit Protocols