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.

Α

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



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.

CONDUCTING AN ENVIRONMENTAL AUDIT

2.

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 questionaires and operational document checklists are given in PAO 1-28 and ODC 1-21.



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



Tips & Hints

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

<u>5</u>.

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



Resource

Examples of on-site audit protocols are provided in:

APC1-3 (Air Pollution Control), OLP1 (Ozone Layer Protection),

WPC1-2 (Water Pollution Control), NC1-2 (Noise Control).

CWM1-7

 $(Chemical\ Waste\ Management),$

DGM1-18

(Dangerous Goods Management). and

EIA-1

(Enironmental Impact Assessment).

CONDUCTING AN ENVIRONMENTAL AUDIT

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