

PREFACE

This Simple Guide to Environmental Audit aims to help organizations conduct environmental audits in an effective and efficient manner. It is also a useful supplement to the Environmental Audit training video - "The Key to a Successful Environmental Audit" - jointly produced by the Environmental Protection Department and the Planning, Environment and Lands Bureau.

The Guide consists of 4 chapters. Chapter 1 provides a brief conceptual overview of the environmental audit process. Chapters 2, 3 and 4 cover the key elements involved from the planning of the audit to its execution and following up in a step-by-step format. This reference tool will lead users through the whole audit process to its successful completion.

This guide is designed so that the explanatory notes, practical tips, references to sample checklists and protocols are put under the following representative collection of "Icons":



Tips and Hints



Proceed with Caution



Information



Pitfalls to Avoid



Resource

PREFACE

The appended sample checklists and protocols are for reference only. They are divided into three sections. The first section contains questionnaires and checklists for completion by the "Audit Site Facilitator" in the pre-audit phase. The second section comprises a series of legislative compliance audit protocols for use by "Internal Auditors" during the on-site audit. The third section includes suggested contents of the audit report and a framework for audit follow-up.

As each audit site will have its own unique characteristics, it is essential that the "Internal Auditors" assess the applicability of the checklists and protocols and make amendments where necessary. It will also be the responsibility of the "Internal Auditors" to update the legislative compliance audit protocols to reflect the latest developments in legislation.

This Simple Guide was adapted from the Environmental Protection Department's Environmental Audit Manual and the Environmental Audit Training Manual which were produced with the help of an expert consultant. Any site-specific environmental audit undertaken with the use of this reference tool should be the sole professional responsibility of the "Internal Auditors". The Environmental Protection Department WILL NOT take any responsibility as the provider of this reference Guide.

Hints for Users:

- 1. This guide is intended for those who have completed some form of basic training or have previous working experience on environmental audit. Users without prior exposure on this subject are encouraged to attend a course on environmental audit before undertaking the process.**
- 2. Users are encouraged to read through the document to familiarize themselves with the audit process before commencement.**
- 3. As each audit site has its own unique set of conditions, the sample worksheets should be used as reference material only. Users are recommended to make modifications and adaptations that suit their own needs.**

1

WHAT IS AN ENVIRONMENTAL AUDIT

Environmental auditing is a systematic, documented, periodic and objective process in assessing an organization's activities and services in relation to:



- Assessing compliance with relevant statutory and internal requirements
- Facilitating management control of environmental practices
- Promoting good environmental management
- Maintaining credibility with the public
- Raising staff awareness and enforcing commitment to departmental environmental policy
- Exploring improvement opportunities
- Establishing the performance baseline for developing an Environmental Management System (EMS)

Conducting an environmental audit is no longer an option but a sound precaution and a proactive measure in today's heavily regulated environment. Indeed, evidence suggests that EA has a valuable role to play, encouraging systematic incorporation of environmental perspectives into many aspects of an organisation's overall operation, helping to trigger new awareness and new priorities in policies and practices.



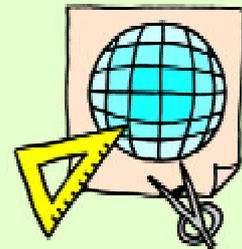
Resource

An overview of the audit Process at the end of Chapter 4 can be pulled out for ease of cross-referencing.

2

PLANNING AN ENVIRONMENTAL AUDIT

Any premises that wishes to conduct an environmental audit must have a clear idea of the objectives of the exercise and the steps required to achieve it. Before commencing an environmental audit, the following requirements must be fulfilled:



1. Commitment

- Obtain commitment at the Directorate level
- Communicate commitment to personnel at all levels

2. Define Audit Scope and Audit Site(s)

To include:

- Audit site and boundary
- Audit objective(s)
- Areas of audit

Audit objectives typically entail:

- Verification of legislative and regulatory compliance
- Assessment of internal policy and procedural conformance
- Establishment of current practice status
- Identification of improvement opportunities

Areas of audit normally encompass:

- Material management, savings and alternatives
- Energy management and savings
- Water management and economy of use
- Waste generation, management and disposal
- Noise reduction, evaluation and control (internal and external)
- Air emissions and indoor air quality
- Environmental emergency prevention and preparedness
- Transportation and travelling practices
- Staff awareness, participation and training in environmental issues
- Environmental information publicity
- Public enquiry and complaints response
- Environmental management system set up, suitability and performance



Tips & Hints

Communicate the environmental audit by a bilingual, clear and easily understandable open memo and during internal management meetings. The message should convey top management commitment, define audit objectives and rally support of personnel.



Tips & Hints

The audit area does not have to cover every aspect of the environment, nor to undertake all aspects at once - just scale according to needs and resource availability.



Information

Relevant environmental statutory issues include air quality, ozone layer protection, noise, water quality, waste management, dangerous goods storage, environmental impact assessment etc. Consult individual specialist groups on the pertinent legislation and regulations.

3. Assemble An Audit Team

An Audit Management Committee (AMC) established by management at Directorate level, is responsible for:

- Overseeing the audit process
- Appointing an Audit Team Leader to be in charge of the audit
- Securing the necessary resources and funding
- Reviewing the Audit Report
- Reporting to the organisation Directorate

The AMC in conjunction with the Audit Team Leader to:

- Appoint Audit Team Members
- Assess requirement for external assistance to ensure thoroughness and objectivity of audit
- Secure financial resources if external assistance is required
- Confirm availability of Audit Team members

At each audit site, Site Facilitator(s) is/are selected to provide local support to the Audit Team in gathering the necessary information and assistance during the audit.



Information

The Audit Team Leader must have experience in EA, knowledge of sectoral activities, appropriate qualifications and good interpersonal skills. He/she will be the focal point of contact between AMC and the audit team members.



Information

Auditors appointed should be familiar with the principles of environmental auditing and the operation of the audit site. To ensure objectivity of the audit, moreover, auditors should preferably be selected from an independent site or office.



Information

Necessary audit resources may include technical expertise from specialists, consultants, analytical service organisations, etc

3

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),
CWMI-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

B On-Site Audit Activities

Objectives

The on-site audit objectives should reflect those of the environmental audit, which are:

- Verification of legislative and regulatory compliance
- Assessment of internal policy and procedural conformance
- Establishment of current practice status
- Identification of improvement opportunities



Actions

1. Opening Meeting

Conduct on-site audit Opening Meeting with Office manager and site personnel to:

- Introduce audit team members
- Present audit scope and objectives
- Outline the audit approach and methodology
- Address questions or concerns of site personnel
- Rally staff support and assistance



Proceed With Caution

Audits are unfortunately often perceived as part of a scheme to dig up 'dirt' or find faults with personnel. Dispel misconception by stressing the audit is a systems performance assessment and that every staff can take part in contributing towards an overall performance improvement.

2. Document Review

Audit Team member to undertake a review of relevant document such as:

- Management policy
- Management system documentation
- Operational procedures
- Records (utility, inventory, monitoring, calibration, transportation, training etc.)
- Previous audit reports
- Green management team meeting minutes
- Green suggestions



Tips & Hints

Refer to Pre-audit questionnaire, Operational document checklists and other documents such as environmental license and permits, records and etc. for detailed list of documents to be reviewed during the audit.

In particular, to evaluate whether the records are:

- Current
- Properly completed
- Signed and dated
- Consistent
- Meet relevant requirements

3. Detailed Site Inspection

Conduct detailed site inspections with aid of on-site audit protocols to look for evidence on:

- Compliance with legislative and regulatory requirements
- Conformance with internal policies, procedures and guidelines
- Status of operational practice
- Staff participation in management system implementation

4. Staff Interview

To obtain information on

- Actual practices (current and past)
- Compliance with/or deviation from statutory and departmental requirements
- Awareness of requirements and expectations
- Ideas to *‘‘do it better’’*
- Comments and suggestions



Tips & Hints

1. *Keep a balance between records review, interviews, and observation.*
2. *Time is limited, better address all areas in the scope to some extent than to leave out entirely*
3. *Maintain a flexible agenda*
4. *Learn and use the protocols, but also use common sense and natural curiosity*
5. *Take time to observe events as they occur.*
6. *Use sound judgement despite the *‘‘regulations and standards’’**
7. *Everyone can identify with this one- a well deserved compliment goes a long way!*



Information

Site inspection activities may also include sampling and analysis as defined by the audit scope.



Tips & Hints

- Whom to interview:
Balanced representation from all levels of organisation, ie. from senior management to support personnel.
- Where:
- *at or near the *‘‘interviewees’’* work station*
 - *private, one-to one*
 - *minimal distraction*
- When:
- *when not interfering with job performance*



Tips & Hints

How (the 3-Up Technique):

i Warm-Up

- state objective of interview assure confidentiality and anonymity of information
- start by asking for job overview
- be informal and show courtesy

ii Open-Up

- ask open ended questions (i.e., the 5Ws)
- summarise and provide feedback to responses

iii Follow-Up

- ask funnelling question
- request examples from past experience to back up responses



Pitfalls To Avoid

Always be on guard against:

- excessive use of acronyms or foreign language(s)
- prolonged silence during interview
- speculation on the part of the interviewee
- personal advocacy of opinion

5. Review Audit Evidence

Ensure adequacy of audit evidence at the conclusion of on site audit by:

- Reviewing information gathered
- Collecting additional information as needed
- Substantiating audit findings
- Summarising and documenting all findings and observations
- Identifying issues requiring immediate attention/mitigation
- Noting outstanding issues requiring follow-up
- Preparing debriefing material for the Closing meeting



Tips & Hints

To be effective, the presentation of the audit findings must be

- clear and unambiguous
- linked to audit criteria as per audit
- verified by objective evidence



Proceed With Caution

All audit findings should be evaluated in context to establish if the evidence represents an actual deficiency or a one time occurrence.

6. Closing Meeting

The Closing Meeting provides an opportunity at the conclusion of on-site audit to:

- Debrief the senior site management
- Summarise the audit activities and findings
- Highlight system strengths and weaknesses
- Discuss preliminary findings and recommended corrective actions
- Bring up findings requiring immediate attention
- Clarify any outstanding issues
- Address staff questions or concerns
- Agree on reporting schedule and chain of communication



Tips & Hints

1. *Identify and resolve all contentious issues before the meeting.*
2. *Open the meeting by acknowledging the co-operation of site personnel.*
3. *Start with the positive; give commendation where justified.*
4. *Focus on strengths and deficiencies on the systems level.*
5. *Listen attentively and respond directly.*
6. *Discuss all findings, no matter how minor.*
7. *Write down all evidences before leaving to minimize future site visits*



Pitfalls to Avoid

Under no circumstances during the Closing Meeting should the followings occur:

1. *Finger pointing*
2. *Lingering on the negatives.*
3. *Inflexibility towards different opinions and disagreements.*
4. *Argument.*
5. *Leaving without agreement on contentious issues or reporting schedule.*

Output

- Documented audit findings and supporting evidence
- Basis for evaluating conformance status in relation to statutory and internal requirements
- Basis for assessing performance status and improvement recommendations

C Post-Audit Activities

Objectives

- To produce an Audit Report with audit findings and recommendations
- To contribute towards formulation of an Action Plan for continual performance improvement



Actions

1. Collate Information and Follow Up Outstanding Issues

Information to be organised should include:

- Completed pre-audit questionnaire, operational document checklists
- Completed on-site survey questionnaires, on-site audit protocols
- All relevant correspondence, memoranda, reports, diagrams and drawings
- Copies of records, photographs, and other information collected during the site visit
- Detailed inspection and interview notes and summaries



Proceed With Caution

Re-confirm validity of uncertain findings and follow-up on outstanding issues where necessary before proceeding to preparation of the Audit Report

2. Prepare the Audit Report

The Audit Report should include:

- An Executive Summary
- Introduction and background to the audit
- Audit scope and objectives
- Description of audit approach and methodology
- Summary of audit findings and recommendations
- Conclusions



Resource

Example of content list of an audit report is provided in CAR-1.

In particular, the findings summary should comprise the followings:

- Status of compliance with environmental legislative requirements
- Status of conformity with internal environmental policies, procedures and guidelines
- Status of good environmental practices implementation
- Level of staff awareness of operational issues relating to environmental performance
- Overall status of environmental performance
- Recommendations for environmental performance improvement



Resource

Format of summary findings given in AFS-1. Allow one summary for each operational group on specific findings, and a separate summary of common issues across the whole site.

3. Circulate Draft Audit Report For Comments

Include the following parties on the circulation list:

- The Audit Management Committee
- Senior audit site management
- Site Facilitator(s)
- Site personnel with responsibilities for implementing the major recommendations
- Other parties included on the agreed circulation list



Pitfalls To Avoid

The value of the EA will be severely entailed if bureaucratic defensiveness or internal power games are allowed to impair the truthfulness of the findings.

4. Final Reporting

- Incorporate or resolve all comments received before producing the Final Report
- Issue the report to the Audit Management Committee and site senior management for endorsement

Output

Final Audit Report addressing

- Environmental Legislation compliance status
- Departmental environmental policies, procedures and guide lines conformity status
- Status of current environmental performance
- Recommendations for performance improvement

4

FOLLOWING-UP AN ENVIRONMENTAL AUDIT



1. Develop Action Plan

Upon endorsement of the Audit Report, an Action Plan with the appropriate targets and objectives for environmental improvement may be developed in consultation with audit site senior management.

An action plan should cover:

- Action objectives;
- Specific actions required;
- Responsible party(ies);
- Budget allotted; and
- Implementation program

2. Implement Action Plan

Responsible party(ies) to undertake actions according to the allotted budget, and the agreed timescale for completion.

3. Checking and Monitoring

To monitor progress of Action Plan implementation, a status report should be carried out and should include information on:

- Progress of action(s) undertaken
- Problem(s) encountered when action(s) taken
- Proposed solution(s) and revised timescale for completion



Resource

Example of an Action Plan is provided in APF-1.

4. Review Action Plan

Review the Action Plan upon completion of Action Plan implementation.

Key points to review include:

- Review results of action plan implementation
- Establish levels of performance improvement achieved
- Address possible need for changes to Green management policy, objective(s) and procedure(s)
- Next audit scope and schedule

Output

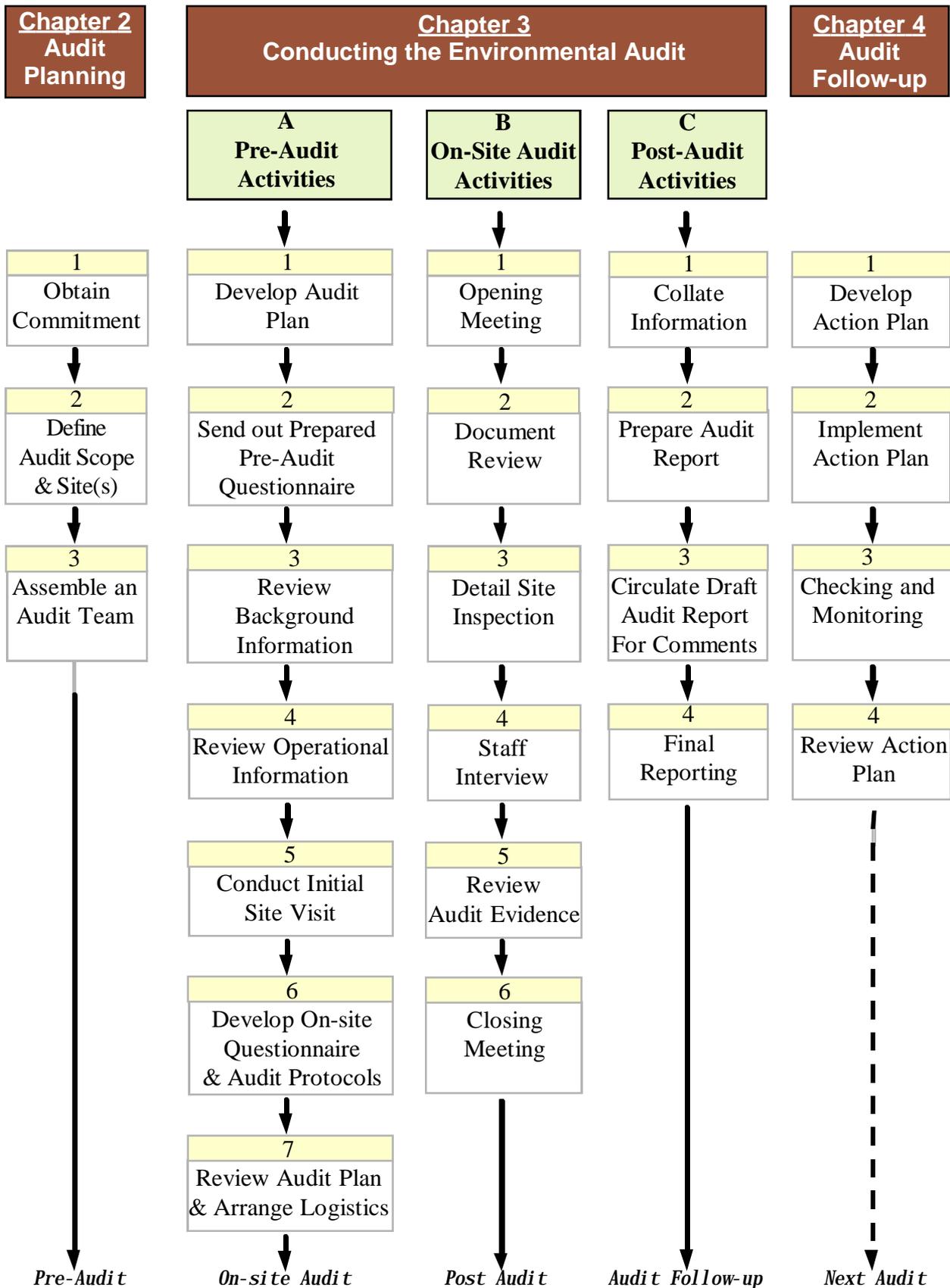
- Action Plan
- Status report for implementation
- Sope and schedule of next audit

You have completed one full cycle of an environmental audit. In the last cycle you have identified the key environmental issues and their effects, established the current performance status, identified environmental performance improvement opportunities and established specific improvement objectives and targets as part of an Action Plan.



We hope that in the process you have also gained invaluable experience and confidence in conducting subsequent environmental audits.

Figure 1: Environmental Audit Process - An Overview



*Information Provided in Confidence***0 Introduction**

The purpose of this questionnaire is gather the necessary information on the audit site prior to undertaking an on-site audit. The questionnaire covers each area of environmental concern, and is supplemented by information checklists for each of these areas. This questionnaire is designed to familiarize the environmental audit team with the site operations prior to the audit visit, while information checklists highlight a list of the documents required prior to the audit.

Please complete the forms as thoroughly and accurately as possible. Where a question does not apply or cannot be answered, please respond with not applicable or unknown. Respondents are encouraged to provide responses which reflect the actual conditions as opposed to the 'ideal' situation. Provision of pertinent information prior to the audit visit will allow the audit team to be adequately prepared resulting in a more effective audit.

Note: Unless otherwise specified, references made to 'premises' or 'area' in this questionnaire generally refer to premises which the respondent represents.

*Information Provided in Confidence***1 General Departmental Information**

(To be completed by the Designated Internal Auditor)

Building Information

- A.
- i. Are the premises owned or leased?
 - ii. When were the properties first acquired by this department?
 - iii. What are the areas of the premises (break down by floor/functional area)?
 - iv. Are there any known cases of asbestos material use in the building construction? If so, are these uses indicated on the floor plans?
- B. Indicate the dates, ownership, and use(s) of the properties prior to the date of acquisition or lease by this department.
- C. Have there been any remedial investigations or corrective actions taken at these premises (e.g. indoor air quality monitoring, wastewater monitoring, etc.)? Describe briefly:
- D. Have there been any known discharges, investigations, or mitigation actions at neighbouring offices/adjacent buildings? If so, describe briefly.
- E. List the names of environmental or building services consultants retained (i.e. IAQ monitoring, energy audit etc.) and briefly describe the projects involved.

Provide name of staff responsible for Departmental building services issues.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.1 Overall Environmental Management*****Departmental Level****(Questions A to K to be completed by Designated Internal Auditors)*

- A. List number of staff at the premises (by location):
- Professional _____
- Technical/Field _____
- Others (please specify) _____
- B. Is there a Departmental Environmental Policy? If so, please provide a copy.
- C. Describe the scope of existing Departmental Policy (i.e. application to resources used, pollution prevention, energy use and conservation, training, public relations etc.).
- D. Is the Environmental Policy signed by the Director of the Department?
- E. Has a Department Environmental Coordinator been formally appointed and given the responsibility of implementing the policy within the Department?
- F. Has the Department Environmental Coordinator been given the responsibility for monitoring the effectiveness of policy implementation?
- G. Is the Environmental Policy on prominent display at all Departmental premises?
- H. Has every staff member been issued with a copy (or summary) of the Environmental Policy?
- I. Is there a written procedure and schedule for reviewing the Environmental Policy?

*Information Provided in Confidence***1.1 Overall Environmental Management (Cont'd)**

- J. Are all revisions of the Environmental Policy communicated to all parties concerned? (i.e., office managers, staff members, concerned public members)?
- K. Have staff, financial and other necessary resources been allocated to cover specific environmental issues (i.e., emergencies, waste management, monitoring, audit, etc.) at Departmental level? Please specify.

Provide name of staff responsible for Departmental Environmental Policy issues.

Name and Title: _____

Location: _____

Telephone: _____

Facsimile: _____

Premise Level

(Questions L to S to be completed by Site Facilitators or designated persons)

- L. List number of staff at the premises (by floor):

Professional _____

Technical/Field _____

Others (please specify) _____

- M. Indicate elements of Departmental Policy pertinent to the responsibility of this premise.
- N. Has an office environmental coordinator been formally appointed and given the responsibility of implementing the policy within the office?

*Information Provided in Confidence***1.1 Overall Environmental Management (Cont'd)**

- O. Has an office environmental coordinator been given the responsibility for monitoring the effectiveness of policy implementation?
- P. Is the Environmental Policy on prominent display at this premise?
- Q. Has every office member been issued with a copy (or summary) of the Environmental Policy?
- R. Are all revisions of the Environmental Policy communicated to all members concerned?
- S. Have staff, financial and other necessary resources been allocated to cover specific environmental issues (emergencies, waste management, monitoring of discharges/ emissions, environmental performance audit) at office level? Please specify.

Provide name of staff responsible for Office Environmental Policy issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.2 Materials Procurement Policy*****Departmental Level***

(Questions A to E to be completed by the Designated Internal Auditors)

- A. Is there an inventory of all incoming supplies and materials for:
- i. Office supplies (i.e., paper, stationery etc.)
 - ii. Computer related supplies (i.e., printer toner cartridges, paper etc.)
 - iii. Refreshment supplies (i.e., Styrofoam cups, packaged beverages etc.)
 - iv. Others (specify)
- B. Are there any defined procedures for inventory keeping, updating and checking?
- C. Is there a mechanism for verifying new supplies/materials for:
- i. Nature, quality, quantity, and specification
 - ii. Compliance with environmental regulations and/or Departmental guidelines
 - iii. Potential environmental impacts
 - iv. Compliance with health and safety regulations and/or Departmental guidelines
 - v. Packaging materials (i.e., quantity, biodegradability, recyclability etc.)
- D. Provide details on any policy/guidance for reviewing existing supplies and materials in relation to possible 'environmentally friendly' alternatives:

*Information Provided in Confidence***1.2 Materials Procurement Policy (Cont'd)**

- E. Is there a similar system of controls on the materials introduced to the premises (i.e., contractors, laboratory samples etc.)?

Provide the name of staff responsible for Departmental procurement issues.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

Premise Level

(Questions F to J refer to areas over and above procurement undertaken at the premise level, and are to be completed by Site Facilitators or Designated persons)

- F. Is there an inventory of all incoming supplies and materials?
- G. Are there any defined procedures for inventory keeping, updating and checking?
- H. Is there a mechanism for checking of new supplies and materials for:
- i. Nature, quality, quantity, and specification
 - ii. Compliance with environmental regulations and/or Departmental guidelines
 - iii. Possible environmental impacts
 - iv. Compliance with health and safety regulations and/or Departmental guidelines
 - v. Packaging materials (i.e., quantity, biodegradability, recyclability etc.)

Information Provided in Confidence

1.2 Materials Procurement Policy (Cont'd)

- I. Provide details on any policy/guidance for reviewing existing supplies and materials in relation to possible 'environmentally friendly' alternatives:

- J. Is there a similar system of controls on the materials introduced to the Departmental premises (i.e., contractors, laboratory samples etc.)?

Provide the name of staff responsible for procurement issues at this premise.

Name and Title: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

*Information Provided in Confidence***1.3 Energy Management***(To be completed by the Designated Internal Auditor)*

- A. Are there records of energy use for the Department's premises (e.g. break down by floor)?
- B. Have there been audits undertaken to identify energy use and minimisation opportunities? If so, where are the reports kept?
- C. Are there defined maintenance programmes to ensure all equipment is operating at optimum efficiency?
- D. Are there formal arrangements to replace energy inefficient equipment/fixtures?
- E. Are there formal procedures to consider energy efficiency when purchasing new equipment?
- F. Is there a written commitment to reduce energy use? If so, attach a copy.
- G. Has the responsibility to reduce energy use been formally allocated in writing?
- H. Programmes to monitor energy use and to quantify reduction? Where are the records kept?

Provide name of staff responsible for energy management issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.4 Material Management**

(To be completed by the Site Facilitators or other appropriate persons)

Office Operation

- A. Is there an inventory for all supplies and materials?
- B. Is there a mechanism for managing existing supplies and materials for:
- i. Nature, quality, quantity and specification
 - ii. Compliance with environmental regulations and/or Departmental guidelines
 - iii. Possible environmental impacts
 - iv. Compliance with health and safety regulations and/or Departmental guidelines
 - v. Packaging materials (i.e. quantity, biodegradability, recyclability etc.)
- C. Describe any guidance or procedures to review current supplies and materials in relation to:
- i. Eliminate/minimise use of 'environmentally unfriendly' materials
 - ii. Eliminate/minimise storage of 'environmentally unfriendly' materials
 - iii. Eliminate/minimise waste generation
 - iv. Recycling and reuse (i.e. printer toner cartridges, used paper etc.)
- D. Describe any guidance or practice on material management leading to overall environmental performance improvement (i.e., double sided printed, single line spacing, use of non glossy report covers, use of recycled paper stock etc.).

*Information Provided in Confidence***1.4 Material Management (Cont'd)*****Laboratory Operation***

- E. Indicate activities where hazardous materials are used. Describe the nature and quantity of hazardous materials involved, including the following materials - acids, irritants, bases, sensitizers, asphyxiants, heavy metals, cryogenics, flammables, carcinogens, poisons, biological/infectious materials, radioactive, explosive materials.
- F. Is there an inventory of all incoming supplies and materials for:
- i. Standard laboratory supplies
 - ii. Dangerous materials
 - iii. Chemicals
 - iv. Biological/infectious materials
 - v. Radioactive materials
- G. Does the facility maintain a current file of material safety data sheets (MSDS) for all hazardous materials stored at the facility?
- H. Provide details of any licences, permits or applications on file pertinent to hazardous materials storage and handling (i.e. title, number, materials covered, etc).
- I. If applicable, describe investigations or corrective actions taken in the past (i.e. regarding fugitive emissions to atmosphere, major chemical spillages, etc.).
- J. Provide details on any policy or practices relating to the prevention or reduction in overall environmental impact concerning:
- i. Elimination of use of environmental or health and safety adverse substances (i.e., ozone depleting substances, asbestos etc.)

*Information Provided in Confidence***1.4 Material Management (Cont'd)**

- ii. Proper storage and leakage containment of dangerous materials and chemicals (i.e., corrosive substances, explosives, poisons etc.)
- iii. Appropriate storage and labelling of materials
- iv. Scheduled inspection of storage and handling facilities

Provide name of staff responsible for hazardous materials handling at this premise.

Name and Title: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

Pesticides

- K. Are pesticides used in the premises? If yes, indicate general types and indicate if the use of these pesticides are restricted by any sort of control:

Algicides _____ Herbicides _____

Insecticides _____ Rodenticides _____

Fungicides _____ Other _____

- L. Are pesticides applied by Departmental personnel? If so, indicate whether any certification is required by pesticide handlers. Provide details of this certification (i.e., certification title and number, type of pesticide covered etc.).

Information Provided in Confidence

1.4 Material Management (Cont'd)

M. If pesticides are stored at these facilities, briefly describe the following:

- i. Locations and storage practices
- ii. Measures in pesticide storage, application and disposal
- iii. Segregation practices

N. If outside contractors are utilized for pesticide application, indicate below:

<u>Contractor</u>	<u>Service Provided</u>	<u>Initial Date of Application & Frequency</u>	<u>Certification Number</u>
-------------------	-------------------------	--	-----------------------------

Indicate the name of staff responsible for pesticides issues at this premise.

Staff name and Title: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

*Information Provided in Confidence***1.4 Material Management (Cont'd)*****Asbestos***

- O. Describe any formal asbestos management programme in place
- P. Describe any formal procedures to audit compliance in the asbestos management programme.
- Q. Have formal surveys and inspections been conducted at the site to identify areas if and where asbestos-containing materials are located?
- R. If known, list the premises that have been identified as having asbestos-containing materials and indicate whether the buildings are leased or owned, whether abatement is occurring or is planned, and the type of asbestos-containing material(s) present.

<u>Premises</u>	<u>Leased/Owned</u>	<u>Abatement Action</u>	<u>Asbestos-Containing Material Type*</u>
-----------------	---------------------	-------------------------	---

* Use following codes: A = sprayed on insulation; B = pipe insulation; C = vessel/ tank insulation; D = equipment (describe, i.e. ovens etc.); E = other (describe, i.e. floor tiles, bench tops etc.)

Provide name of staff responsible for asbestos management issues.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

Information Provided in Confidence

1.5 Water Supply Management

(To be completed by Site Facilitators or other appropriate persons)

- A. Indicate the source of water supply at the premises.

- B. What are the uses of water supplied?

- C. Describe any on-site potable/process water treatment systems.

- D. Indicate frequency of system maintenance/resin regeneration.

Provide name of staff responsible for water supply and quality issues at this premise.

Name and Title: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

*Information Provided in Confidence***1.6 Wastewater Management***(To be completed by Site Facilitators or other appropriate persons)*

- A. List the sources of wastewater, type of discharge and daily volumes for the following types of wastewater.

	<u>Source</u>	<u>Discharge Frequency</u>	<u>Volume (indicate units)</u>
i.	Laboratory Wastewater		
ii.	Sanitary Wastewater		
iii.	Cooling Water Contact Noncontact		
iv.	Others (describe)		

- B. Provide details of any licences or applications on file pertaining to water pollution control regulations (i.e. licence title and number, issuing agency, sources of wastewater covered, locations of discharge points, specific discharge standards etc.).
- C. Describe type(s) of wastewater pre-treatment prior to discharge (i.e. oil separation, neutralization, filtration, ion exchange, carbon treatment etc.).
- D. Indicate locations of all discharge points.
- E. Describe operational specifications and maintenance schedules of the pre-treatment system. Have records been kept?

*Information Provided in Confidence***1.6 Wastewater Management (Cont'd)**

- F. Is any wastewater recycled? If so, describe briefly (i.e. treatment and use).
- G. Describe any formal criteria for reviewing the premises discharge strategies (i.e., reduce or eliminate discharges).
- H. Describe any written procedures to be followed in the event of exceedence of discharge standards.
- I. Are all relevant staff fully trained in the above procedures?
- J. Describe any wastewater compliance monitoring programmes in place. Where are records of all monitoring results kept?
- K. Were there ever any internal investigation and/or mitigation actions taken for wastewater related issues? If so, specify.

Provide name of staff responsible for premises related wastewater regulatory issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.7 Waste Management**

(To be completed by Site Facilitators or other appropriate persons)

- A. Provide details of internal classification, source, nature, quantity and frequency of waste generated (including waste samples brought in for analysis and used pesticides) for:
- i. Dangerous waste
 - ii. Chemical waste
 - iii. Biological/infectious waste
 - iv. Solid waste (including obsolete equipment)
 - v. Radioactive waste
 - vi. Other wastes (specify)
- B. Provide details of any licences, permits or applications on file (i.e. licence/permit and title, number, issuing agency, sources covered, special conditions etc.) in relation to generation, storage, handling, disposal or transportation of these wastes.
- C. Provide details of any on-site waste or disposal systems (i.e. type of waste disposal system and capacity, type and quantity of waste disposed of etc.) for these wastes.
- D. Describe operational specifications and maintenance schedules of the pre-treatment system. If records have been kept, indicate location.
- E. Briefly describe any waste recycled (i.e. type, source, characteristics, treatment and use).
- F. Briefly describe any current waste minimisation programmes (i.e., reduction, reuse and recycling) and indicate responsible staff.

*Information Provided in Confidence***1.7 Waste Management (Cont'd)**

- G. Provide the following information for any off-site facilities used for waste treatment, storage or disposal in the past three (3) years.

<u>Company Name</u>	<u>Premises Name</u>	<u>Type of Waste</u>	<u>Volume (Per Month)</u>	<u>Treatment/ Disposal Method</u>
---------------------	----------------------	----------------------	---------------------------	-----------------------------------

- H. Existing programme to audit regulatory compliance in place at the premises? Describe briefly.
- I. Has there been any internal investigation in relation to waste generation, storage, handling or disposal? If so, describe briefly.

Provide name of staff responsible for waste management issues at this premise.

Name and Title: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

*Information Provided in Confidence***1.8 Air Quality Monitoring and Control***(To be completed by Site Facilitators or other appropriate persons)***General**

- A. Describe any formal policy or written guidance in relation to air quality (e.g. smoking policy, use of non-formaldehyde containing carpet underlay/furniture, substitute ozone depleting substances in solvents, refrigerants and fire extinguishers etc.).

Office Operation

- B. Indicate the number of each type of the following equipment at this premise:

Laser printer

Xerox/Photocopier

Facsimile machine

Computer

Others(e.g. ozone generator, specify)

- C. Indicate all other significant sources of indoor air emissions/pollutants not covered above.
- D. Has indoor air pollution at this premise been monitored in the past? If so, are records of findings kept and where?
- F. Is there a programme to monitor the indoor air quality at this premise? If so, describe briefly.
- G. Describe any mitigation actions taken in the area with respect to indoor air quality improvement.

*Information Provided in Confidence***1.8 Air Quality Monitoring and Control (Cont'd)**

- H. If applicable, indicate any known respiratory symptoms or irritations experienced by your premise members (i.e. frequent flu symptoms, sore throat, eye irritation etc.).
- I. Describe known time pattern of symptoms occurrence and relief (i.e. morning, afternoon, weekend etc.).

Provide the name of staff responsible for indoor air quality issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

Laboratory Operation

- J. Identify operations conducted at the premises that involve air emissions (i.e. handling of chemicals and solvents, biological sample preservation etc.).
- K. Is there an inventory of all emissions (including fugitive emissions) released from the area?
- L. Describe any programme of updating emissions inventory.
- M. Describe the air pollution control equipment installed and operating at the premises (i.e. particulate filters, scrubbers etc.).

*Information Provided in Confidence***1.8 Air Quality Monitoring and Control (Cont'd)**

- N. Indicate the number and location of stacks, vents or other outside emission points originating from the area.
- O. Provide details of any licences or applications on file pertinent to ambient air quality regulations (i.e. licence title and number, issuing agency, sources of air emissions etc.).
- P. Describe any formal criteria for reviewing the premises emission strategy (i.e., eliminate or reduce emissions).
- Q. Has this area ever been under any internal investigation and/or taken mitigation action related to ambient air emissions? If so, specify.
- R. Describe any ambient air compliance monitoring programmes in place at the premises. Are records kept of all monitoring results?
- S. Describe any written procedures to be followed in the event of standard exceedance.
- T. Are all relevant staff fully trained in the above procedures?

Provide name of staff responsible for outdoor air quality issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.9 Noise Monitoring and Control**

(To be completed by Site Facilitators or other appropriate persons)

- A. Identify all operations or activities that may substantially elevate noise beyond normal premise background levels.

- B. If applicable, describe any current practices to reduce noise levels at the premise.

- C. Have there been any noise monitoring programmes undertaken at the premises? If so, describe briefly.

- D. Have there been any formal complaints received on noise generated within the area? If so, provide details.

Provide name of staff responsible for noise monitoring and control issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.10 Transportation and Travel***(To be completed by Site Facilitators or other appropriate persons)*

- A. Describe any formal car fleet procurement policies or selection criteria related to overall environmental performance (i.e. fuel type and economy, refrigerant use, emissions standard, noise level, recyclability of materials, paint use etc.).
- B. Is there an inventory of transportation devices operated by the Department? Describe scope of the inventory (i.e. fuel type and economy, emission level, maintenance requirements etc.).
- C. Describe scope of maintenance programme in place for all transportation devices.
- D. Is there any formal policy or guidance on spillage prevention and disposal of fleet maintenance wastes (i.e., engine oil, refrigerant, tyre etc.)?
- E. Is there a programme in place to monitor air and noise emissions and to effect appropriate arrangement for corrective maintenance as required?
- F. Describe training/instruction provided to drivers/operators on increasing the fleet's environmental performance (i.e. turn off idle engines, minimise number of trips etc.)?
- G. Is there any written policy or guidance on use of Department vs. private vehicles?
- H. Existing guidance on staff transport arrangements to encourage use of public transportation?

Provide name of staff responsible for transportation and travel related issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.11 Emergency Response Procedures***(To be completed by Site Facilitators or other appropriate persons)*

- A. Attach copy of any formal emergency response procedures and/or contingency plans on:
- i. Disruption of water supply
 - ii. Supplied water treatment system failure
 - iii. Wastewater treatment system failure
 - iv. Chemical/chemical waste spillage
 - v. Dangerous materials/waste spillage
 - vi. Biological/infectious materials/waste release
 - vii. Radioactive materials/waste release
- B. Provide details of any equipment located in areas where emergencies have the potential to occur.
- C. Are the staff in these areas appropriately trained in emergency response procedures?

Provide name of staff responsible for emergency response procedures issues at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.12 Staff Awareness and Training**

(To be completed by Site Facilitators or other appropriate persons)

Staff Awareness

- A. Are there any regular general meetings on the improvement of the working environment?
- B. Has there been wide participation in specific environmental management issues in the office (e.g. campaigns on reduction of paper and energy usage)? If so, are staff members adequately informed of the specifics (i.e. objectives, approach etc.)?

Training

- C. Describe briefly the nature and topics of premises environmental training (workshops, seminars, campaigns/ activities etc.) offered in the past year.
- D. Is the training programme offered to all relevant personnel?
- E. Have there been regular reviews to ensure the effectiveness of the training programme?
- F. Have the participants been involved in the training review process?

Provide name of staff responsible for staff awareness and training related issues at this premise.

Name and Title: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

*Information Provided in Confidence***1.13 Publicity of Environmental Information***(To be completed by Site Facilitators or other appropriate persons)*

- A. Describe any formal programme to ensure staff members responsible for publicity of environmental information have the relevant experience and adequate training.
- B. Are there any formal procedures to review adequacy of publicity materials?
- C. Describe any programme to ensure that information contained in the publicity materials are correct and up to date.

Provide name of staff responsible for publicity of environmental information at this premise.

Name and Title:

Location:

Telephone no.:

Facsimile no.:

*Information Provided in Confidence***1.14 Response to Public Enquiries and Complaints***(To be completed by Site Facilitators or other appropriate persons)*

- A. Describe any formal procedures or guidelines in enquiry referral (i.e. both internal and external).
- B. Does the Department have any procedures in place to handle enquiries on environmental information that is publicly available? If so, describe the procedures.
- C. Are there any procedures or guidelines available to handle complaints received from the public? If so, describe briefly.

Provide name of staff responsible for public enquiries and complaints at this premise.

Name and Title: _____

Location: _____

Telephone no.: _____

csimile no.: _____

QUESTIONNAIRE COMPLETED BY:

Name and Title: _____

Premise: _____

Location: _____

Telephone no.: _____

Facsimile no.: _____

Date: _____

1 GENERAL INFORMATION**Premise Information**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Diagrams of premises layout				
2. Drainage layout plans				
3. Environmental reports (prepared in-house or by external consultants)				
4. Diagrams of ventilation ducting layout				
5. Diagrams of lighting wiring layout				

2 OVERALL ENVIRONMENTAL MANAGEMENT

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Departmental Environmental Policy Statement				
2. Procedures and schedules for reviewing the Environmental Policy				
3. Record of overall environmental performance review meetings				
4. Departmental environmental management structure				

3 MATERIALS PROCUREMENT POLICY

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Procurement policy				
2. Procedures for inventory keeping, updating and checking				
3. Procedures for the review and selection of materials that are not environmentally detrimental				
4. Guidelines on 'green products' for suppliers				

4 ENERGY MANAGEMENT

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Energy use records for the past three years: - Gas - Electricity - Liquid Fuel - Solid Fuel Evaluation Frequency				
2. Audit reports or monitoring data on energy conservation				
3. Procedures or guidelines for energy conservation				
4. Documentation on energy conservation upgrades over past three years				

5 HAZARDOUS MATERIAL* MANAGEMENT**Office Operation**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Procedures or guidelines for material management (i.e. specific storage and handling procedures, etc.)				
2. List of any hazardous materials and chemicals stored within the office areas.				
3. Diagrams showing the routes for hazardous materials and chemicals transport				
4. Diagrams showing the storage areas, for hazardous materials and chemicals				

* Hazardous material denotes substances which can threaten public health; including substances controlled by the Dangerous Good Ordinance (Cap.295), Pesticides Ordinance (Cap.133) and Air Pollution Control Ordinance (Cap.311) and Factories and Industrial Undertakings Ordinance (Cap.59).

5 HAZARDOUS MATERIAL* MANAGEMENT (Cont'd)**Laboratory Operation / Public Service**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
5. Certification for the analyses being conducted (eg. HOKLAS** certification)				
6. Document on contracted out laboratory analyses and copies of the laboratories' certification for the analyses				
7. Evidence of analytical methods used in compliance with standard methods				
8. Dangerous goods / chemicals inventory				
9. List of permits for storage of dangerous goods and chemicals				
10. Procedures or guidelines for dangerous goods / chemical handling				

* Hazardous material denotes substances which can threaten public health; including substances controlled by the Dangerous Good Ordinance (Cap.295), Pesticides Ordinance (Cap.133) and Air Pollution Control Ordinance (Cap.311) and Factories and Industrial Undertakings Ordinance (Cap.59).

** HKOLAS denotes Hong Kong Laboratory Accreditation Scheme

5 HAZARDOUS MATERIAL* MANAGEMENT (Cont'd)**Laboratory Operation / Public Service (Cont'd)**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
11. Diagrams showing hazardous materials storage areas				
12. Hazardous materials inspection logs				
13. Material Safety Data Sheet (MSDS) file				
14. Guidelines provided for training of staff in handling hazardous materials/chemicals				
15. Documentation/training for personnel				
16. Violation notices received				
17. Alarm systems and evacuation procedures in case of an emergency				

* Hazardous material denotes substances which can threaten public health; including substances controlled by the Dangerous Good Ordinance (Cap.295), Pesticides Ordinance (Cap.133) and Air Pollution Control Ordinance (Cap.311) and Factories and Industrial Undertakings Ordinance (Cap.59).

5 HAZARDOUS MATERIAL* MANAGEMENT (Cont'd)

Pesticides

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
18. Pesticides inventory				
19. Pesticides storage area diagrams				
20. Guidelines for pesticide handling				
21. Records of the use of pesticides in office and laboratory areas for the past three years				
22. Violation notices received in the past three years				

* Hazardous material denotes substances which can threaten public health; including substances controlled by the Dangerous Good Ordinance (Cap.295), Pesticides Ordinance (Cap.133) and Air Pollution Control Ordinance (Cap.311) and Factories and Industrial Undertakings Ordinance (Cap.59).

5 HAZARDOUS MATERIAL* MANAGEMENT (Cont'd)**Asbestos**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
23. Formal asbestos management plan or policy statement				
24. Asbestos-containing materials (ACM) inspection or survey reports				
25. ACM management or monitoring plans and copies of any ACM abatement or removal plans or certifications				
26. Regulatory agency inspection reports				
27. Notices of violation received pertaining to asbestos				
28. List of any operations which generate asbestos waste				

* Hazardous material denotes substances which can threaten public health; including substances controlled by the Dangerous Good Ordinance (Cap.295), Pesticides Ordinance (Cap.133) and Air Pollution Control Ordinance (Cap.311) and Factories and Industrial Undertakings Ordinance (Cap.59).

6 WATER SUPPLY MANAGEMENT

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. List of sources of water supply (including that for flushing)				
2. Records of water consumption (office and laboratory)				
3. Water quality monitoring data				
4. Details of water pretreatment system				

7

WASTEWATER MANAGEMENT

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Wastewater discharge licence(s)				
2. Expedient connection & site drainage plan				
3. Effluent discharge monitoring data				
4. Regulatory inspection reports				
5. Violation notices received in the past				
6. Floor plans the wastewater storage and discharge points				
7. Accessibility of discharge point(s) for sampling				
8. Details of existing wastewater treatment facilities				
9. Operation and maintenance manual(s) for wastewater treatment facility(ies)				
10. Procedures or guidelines for collection, preparation and analysis of wastewater samples				

8 WASTE* MANAGEMENT

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Permit(s) or licence(s) for waste storage, transportation and disposal with specification of terms and conditions				
2. Procedures or guidelines for waste handling				
3. Guidelines for classification of waste				
4. Diagrams showing waste storage areas and routes for waste handling				
5. List of sources generating these wastes				
6. Waste analysis data and profiles for all current waste streams				
7. Waste surveys or reports prepared				
8. Copies of any regulatory inspection reports				

* Waste denotes dangerous waste, chemical waste, biological/infectious waste, solid waste, radioactive waste and other wastes.

8 WASTE* MANAGEMENT (Con'd)

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
9. Any violation notices received				
10. Waste transportation and disposal documentation (including waste contractor licences and any associated documents)				
11. Waste recycling and minimization plan and associated documents				
12. Documents related to the disposal facilities used				
13. Operating records of any disposal facilities				
14. Any incident reports for the past three years				
15. Waste control or management licences issued from the appropriate authorities				
16. Safety procedures or programmes.				

* Waste denotes dangerous waste, chemical waste, biological/infectious waste, solid waste, radioactive waste and other wastes.

8 WASTE* MANAGEMENT (Con'd)

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
17. Details of waste segregation programme(s)				
18. Dangerous Goods Licence(s)				
19. Training records for personnel				

* Waste denotes dangerous waste, chemical waste, biological/infectious waste, solid waste, radioactive waste and other wastes.

9 AIR QUALITY MONITORING AND CONTROL**General**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Air quality policy				
2. Air quality survey records or reports				
3. Air quality monitoring data				
4. Any complaints related to emissions to the atmosphere or indoor environment				

Indoor Air Quality

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Guidelines for the use of office machines or operations to minimize gaseous emissions				
2. Reports of any in-house investigation of emission sources				
3. Details of mitigation measures taken and evaluation of its effectiveness				
4. Details of indoor air quality improvement programme(s)				

9 AIR QUALITY MANAGEMENT AND CONTROL (Cont'd)**External Air Emission**

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. All permits related to air emissions				
2. Any violation notices regarding air emissions issued within the past three years				
3. Investigation reports identifying any sources of air pollutant emissions.				
4. Diagrams of premise emission locations				
5. Compliance, assessments, and/or sampling reports				
6. List of control apparatus for air emissions				
7. Air quality monitoring logs				
8. Plan(s) for air emissions elimination or reduction				

10 NOISE MONITORING AND CONTROL

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Noise Control Policy				
2. Noise monitoring data or monitoring programmes being exercised				
3. Reports of any in-house investigations to identify the source of noise emissions				
4. Details of mitigation measures and their effectiveness				
5. Details of programme for improvement of noise emissions				
6. Complaints related to noise emissions				

11 TRANSPORTATION AND TRAVEL

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Departmental policy relating to transportation and travel				
2. Records or reports for the use of Departmental vehicles				
3. Maintenance and overhaul procedures or guidelines for Departmental vehicles				
4. Procedures for handling of chlorofluorocarbons (CFC)				
5. Procedures for handling of used oil & antifreeze				
6. Records of fuel consumption of Departmental vehicles				
7. Data on the environmental performance of the Departmental vehicles				

12 EMERGENCY RESPONSE PROCEDURES

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Emergency response procedures and contingency plans				
2. Staff training record in emergency response procedures				

13 STAFF AWARENESS AND TRAINING

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. List of any regular meetings on the improvement of the working environment				
2. Copy of any Departmental environmental policy on staff training				
3. List of staff training programmes relating to environmental matters				
4. Details of criteria for selection of staff to attend the relevant training programme				
5. Reports on the effectiveness of training programme				
6. Staff training record				

14 COMMUNITY RELATIONS

Information to be reviewed	Available	Not Available	Not Applicable	Location of Documents/Comments
1. Procedures or guidelines for the dissemination and/or publicity of environmental information				
2. List of regular publications				
3. Details of training programme for staff responsible for publicity of environmental information				
4. Procedures or guidelines on responding to public enquiries and complaints				
5. Records or reports of public enquiries and complaints				
6. Staff training programme on public enquiry and complaint response				

Address

Attn.: Internal Auditor/Site Facilitator

Date

Dear (Name of Addressee)

On behalf of (Name of Department), we appreciate your assistance with these environmental audits. The objective of these audits is to review the environmental management system and legislative and internal policy compliance status at (Name of Department) premises.

The intent of this Pre-Audit activity request is to gather information for use by the Audit Team. The information will allow for a more focused and efficient audit, avoiding the need for additional unscheduled onsite time. Planned time onsite will range from half to full day depending on the size and complexity of the operation.

The Pre-Audit Questionnaire should be completed and returned to the undersigned by (Date), two weeks in advance of the site visit to (Name) at (Address), (Fax #). Feel free to hand write your responses on the questionnaire. As for The Operational Document Checklist, the objective is to assist each facility in locating the records and other information pertinent to the audit and ultimately make the audit more efficient. However, if the records are decentralised, it is not necessary to relocate them for this audit.

Several of the items on the Checklist may not have an application at your location. If you feel certain items do not apply or if you are uncertain as to the specific request, please indicate "NA" or "?" to the left of the listed item, respectively. The appropriate audit team member will further discuss that point with you to see if there is a potential application at your premises.

We thank you in advance for your time and for making our work together as beneficial as possible.

Yours sincerely

(Signature)
Audit Manager

This audit does not cover the audit for use of conventional liquid fuel, open burning and air pollution control on vehicles.

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Air Pollution Control Ordinance and the Subsidiary Regulations (Cap. 311, sub.leg. A, B, C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
sub.leg.A S.3	<p>Use of furnace, Oven or Chimney</p> <p>(1)(a) Any furnace, oven or chimney which consumes</p> <p>(i) >25L of conventional liquid fuel per hour</p> <p>(ii) >35kg of conventional solid fuel per hour</p> <p>(iii) >1150 megajoules of any gaseous fuel per hour</p> <p><i>If none of the above is positive, then skip this subsidiary legislation (A).</i></p> <p>Examine approval from Authority & attach a copy</p>					<p>Particulars of Furnace, Oven or Chimney -</p> <p>Type, grade & quantity of fuel consumed:</p> <p>Operation time in each period of 24 hrs:</p> <p>Details of automatic or semi-automatic control connected:</p> <p>Rating of the boiler:</p> <p>Dimension & material of chimney:</p> <p>Mechanical stoking device (for solid fuel):</p> <p>Burner appliance (for liquid or gaseous fuel):</p>
sub.leg.B S.5	<p>Use of Liquid Fuel</p> <p>(1) Use of liquid fuel with a viscosity with point of ignition >30 centistokes or an equivalent viscosity</p> <p><i>If negative, then skip this subsidiary legislation (B).</i></p> <p>(2) Examine approval from Authority attach a copy</p>					
S.3	<p>Sampling Points</p> <p>(1)(a) Any notice from the Authority for providing a sampling point</p> <p>(1)(b) Any sampling point for the Authority taking samples of dust & grit</p>					<p>Particulars of Sampling Sites -</p> <p>Position:</p> <p>Design:</p>

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Air Pollution Control Ordinance and the Subsidiary Regulations (Cap. 311, sub.leg. A, B, C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
sub.leg.C S.3	<p>Emission of Dark Smoke Any chimney in operation <i>If negative, then skip this subsidiary legislation (C).</i></p> <p>Examine monitoring records</p> <p>Emission of dark smoke for more than 6 mins in any period of 4 hrs Emission of dark smoke for more than 3 mins continuously in any time</p>					
Cap.311 S.12	<p>Specified Process (1) Any specified process listed in Schedule 1 of Cap.311 in the premises <i>If negative, skip the following of S.12 in Cap.311</i></p> <p>Examine licence & attach a copy</p>					
	Examine any record of previous prosecution / complaints on air pollution					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Air Pollution Control Ordinance and the Subsidiary Regulations (Cap. 311, sub.leg. A, B, C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
Cap.311 S.69	<p>Asbestos Control Work</p> <p>(1) Any asbestos containing material in the premise <i>If negative, skip the following & remarks of S.69 in Cap.311</i></p> <p>Examine asbestos management plan & attach a copy Examine asbestos investigation report & attach a copy Confirm the qualification of the registered asbestos consultant</p>					<p>Particulars on asbestos containing material-</p> <p>Location: Quantity: Type: Composition: Physical condition: Accessibility:</p>
Cap.311 S.79	Any record of asbestos abatement notice & attach a copy if there is any					

* N/A - not applicable; Unk - Unknown

This protocol does not cover the import, export or manufacture of the ozone depleting scheduled substances.**

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Ozone Layer Protection (Controlled Refrigerants) Regulation (Cap. 403, sub.leg.B)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.5	Approval (1) Any use of controlled refrigerant <i>If negative, then skip the following of this audit checklist.</i> Examine approval from Authority & attach a copy					
S.7	Record of Refrigeration Equipment Service (1) Examine the record of refrigeration equipment service by authorized person & attach a copy (2) Confirm retention of the record for at least 1 year					Particulars of Refrigeration Equipment Service- Date of refrigerant removal: Date of refrigerant replacement: Registration No. of the authorized person:

* N/A - not applicable; Unk - Unknown

** As defined in Schedule 1 of Ozone Layer Protection Ordinance (Cap.403) and the amendment to schedule in 1994, ozone depleting substances include chlorofluorocarbons (CFC), halons, other fully halogenated chlorofluorocarbons, methyl chloroform, carbon tetrachloride, methy bromide, hydrobromofluorocarbons (HBFC) and Hydrochlorofluorocarbons (HCFC).

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Water Pollution Control Ordinance (Cap.358)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk.	
S.19	Licence Discharge, other than domestic sewage and unpolluted water**, into (i) Water Control Zones (ii) Inland water (Iii) Communal sewers & drains Examine licence to discharge or from non-domestic premise & attach a copy Examine expedient connection & site drainage plan					Sources of discharge: Type of drainage connected:
S.20	Licence Conditions (as per license) (4) Compliance with licence terms & conditions Licence terms & Conditions: i/ _____ ii/ _____ iii/ _____ iv/ _____ v/ _____ Examine & attach effluent sampling/measurement records					Particulars on the discharge - Place: Time/period: Rate/total amount: Characteristics: Effluent treatment & equipment used: Asses the competence of treatment equipment & operators

* N/A - not applicable; Unk - Unknown

** For definition of domestic sewage and unpolluted water, please refer to attachment WPC-1.

Definition of Domestic Sewage and Unpolluted Water (Cap. 358, Section 9 - subsection 3)

Domestic Sewage means waste of a kind and quantity that is generated by the domestic use of toilet, watercloset, bath, shower, sink, basin or other sanitary fitment by person residing in a household or while at a place of work but does not include -

- (a) the solid residue from a wastewater treatment facility;
- (b) the effluent from a wastewater treatment facility that uses electrical or mechanical equipment in its operation; or
- (c) waste that is generated by a food business that is subject of the Food Business (Regional Council) Bylaws (Cap. 132 sub. leg.) or the Food Business (Urban Council) By-laws (Cap. 132 sub. leg.);

Unpolluted Water means -

- (a) rain water from any part of a building, including any area appurtenant of a building;
- (b) water used -
 - (i) for firefighting purposes;
 - (ii) in connexion with an occurrence in which life or property is endangered;
 - (iii) for the cleansing of streets, thoroughfares, and other areas.

This protocol covers only noise arising from public places and domestic premises only.

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Noise Control Ordinance (Cap.400)						
Reference	Requirements	Activity Compliance				Comments/Remarks
		Yes	No	N/A	Unk	
S.4	Noise at Night or on a General Holiday Any annoying noisy activity produced - (1) Between 11 p.m. & 7 a.m. (1) At any time on a general holiday					
S.5	Noise at Any Time Any annoying noise produced from - (1)(a) Musical or other instrument operation (1)(b) Loud-speaker, megaphone, or other device for magnifying sound (1)(d) Trade or business activity (2) Air-conditioning or ventilating system (3) Animal or bird Examine any record of previous prosecution / complaints					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Noise Control Ordinance (Cap.400)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.14	<p>Manufacture of Noisy Product (For Use in 2nd Party Audit) (1) Any trade or business or manufacture or supply of noisy product If negative, skip the following of S.14 & S.16.</p> <p>(3)(a) Product equipped with prescribed device for minimizing noise emission (3)(b) Product fitted with prescribed label relating to noise emission (4) Product comply with all information stated on the prescribed label</p>					
S.16	<p>Product Testing (For Use in 2nd Party Audit) (1) Any product testing required by the Authority Examine & attach the notice If negative, skip the following & remarks of S.16</p> <p>(2)(d) Examine result of the product testing and attach a copy</p>					Place of manufacture: Place of testing: Date of manufacture: Date of testing: Authorized officer at the product testing:

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.6	Registration Examine Chemical Waste Producer Registration & attach a copy					Business activity: Type of chemical waste produced:
S.8	Chemical Waste Disposal (1)(a) Arrangement to deliver chemical waste to reception point(s) (1)(b) If disposal internally, examine license and attach a copy (2) If no suitable reception point in HK for the waste, examine & attach the approval for the present disposal arrangement					Reception point(s):
S.9	Containment Waste containers of - suitable design - suitable material (corrosion resistant) - well maintained					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.10	Proper Packing (1)(a) Waste stored to ensure handling safety and container effectiveness (1)(b) Containers properly & securely closed and surface free of waste (1)(c) Incompatible wastes not mixed, packed or stored in same container (1)(d) Sufficient air space allowed in containers of liquid chemical waste					
S.11	Use of Large Containers Examine the written approval of the Authority for use of containers over 450 litres in capacity & attach a copy					
S.12	Labelling (1)(a) Bilingual label on every container with proper design and dimensions as specified in Parts 1 to 4 of Schedule 2 of sub.leg.C in Cap.354 (1)(b) Accuracy and sufficiency of information on labels for safe storage, handling & transport (1)(c) Labels secured, kept clean and easily visible					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.16	<p>Storage in Working Area</p> <p>(a) Wastes stored in working area (b) Quantity stored in single are below 50 litres (c) Containers properly stored and labelled (d) Containers kept in cabinet or receptacle of suitable material and construction (e) Containers of incompatible wastes separated by an impermeable partition inside cabinets</p> <p><i>If all of the above are positive, then skip S.13, S.14 &S.15</i></p>					
S.17	<p>Storage in Large Fixed Containers</p> <p>(a) waste stored above ground in approved and fixed containers <i>If positive, then skip S.13 & S.15</i></p> <p>(b) waste stored below ground in approved and fixed containers <i>If positive, then skip S.13, S.14 & S.15</i></p>					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.13	Storage Area (2)(a) Dedicated storage area (2)(b) Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers (2)(c) Adequacy of area ventilation (2)(d) Isolation from surface water drains or foul sewers (2)(e) Adequacy of handling space (2)(f) Indoors storage area and building escape/ exit not obstructed (2)(g) Outdoors storage area covered (2)(h) Storage area kept clean and dry					
S.14	Liquid Waste Storage (1)(a) Storage area floor/surface permeation proofed (1)(b) Capacity of retention structure sufficient to accommodate contents of the largest container OR 20% volume of waste in storage (1)(c) Walls or partitions of stacked container storage area constructed of impermeable material					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.15	Container Storage (1)(a) Segregated storage of chemical waste containers posing health and safety risks (1)(b) Measures to prevent collapsing of stacked containers					
S.18	Warning Signs on Storage Area (1) Warning notice at/near the entrance or opening of every chemical waste storage area, cabinet and receptacle (2)(a) "CHEMICAL WASTE" in bold red on white background in both English and Chinese (>6 cm in height) on the panel (2)(b) Panel securely attached to or marked on vertical plane of storage structure (2)(c) Panels are durable, weather resistant and rigidly attached (2)(d) Kept clean and free from obstruction					
S.21	Engagement of Waste Collector Examine contract with a licensed waste collector & attach a copy					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.22	Particulars on Waste Collection (1) Examine & attach a copy of trip ticket					Confirm complete details (type, nature, quantity etc.) of waste on trip tickets
S.28	(1) Confirm retention of trip ticket copies for 12 months					
S.23	Particulars on Waste Collector (for use in 2nd party audit) (1)(a) Complete details required by the trip ticket and 2 copies (1)(b) Confirm & certify details on the trip ticket and 2 copies (1)(c) Comply with other requirement specified on the trip ticket (2)(a) Confirm a securely packed and correctly labelled chemical waste before removal (2)(b) Confirm completion of trip ticket before removal (3) Return one copy of the completed trip ticket to waste producer					
S.24	(1) Possess the original and a copy of the completed trip ticket (2) Deliver the waste to a reception point not later than 48 hours after the collection					
S.25	(1) Hand over the original and one copy of the completed trip ticket to the manager of the reception point					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor (s) _____
 Site Personnel _____

Legislation: Waste Disposal (Chemical Waste)(General) Regulation (Cap.354 sub.leg.C)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.30	Emergency Procedures (1)(a) Availability of written emergency procedures (1)(b) Adequacy of employee instruction and training on emergency procedures					Assess employee competence & awareness

* N/A - not applicable; Unk - Unknown

The protocols for dangerous goods management do not cover those substances in Category 1 (explosives) & Category 9A (combustible goods exempted from section 6-11 of the Dangerous Goods Ordinance), as well as all categories of dangerous goods in freight containers and air cargo terminal.

Confirm manufacture, storage or use of the following goods at this premise -

Dangerous Goods Category	Dangerous Goods Type	Specify Activity Involved			Description of Dangerous Goods
		Mfg.	Store	Use	
1	Explosives				
2	Compressed Gases				
3	Corrosive Substances				
4	Poisonous Substances				
5	Substances Giving off Inflammable Vapour				
6	Substances become Dangerous by Interaction with Water				
7	Strong Supporters of Combustion				
8	Readily Combustible Substances				
9	Substances Liable to Spontaneous Combustion				
10	Other Dangerous Substances				

* For definition of different types of dangerous goods, please refer to Schedule 1 of Cap.295 sub.leg.A.

This protocol does not cover the audit for filling and conveyance of Category 2 dangerous goods (Compressed Gases).

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 2 (Compressed Gases)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.62	<p>Licence (1) Examine licence to manufacture/store compressed gases & attach a copy</p> <p><i>Exempt if the quantity of such gas listed in the 1st column of table in S. 74 of sub.leg.B in Cap.295 not exceeding that specified in the 2nd column AND the total quantity of all gases in the same store <5 cylinders (i.e. 25L)</i></p>					Registration No.: Business activity: Type of compressed Gases: Quantity: Confirm with the table of section 74 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.63	<p>Licence Conditions (a) Conformation of storage construction with the approved plan</p> <p>(b) Equipped with appropriate fire extinguisher</p>					Storage site: Material of construction: Means of ventilation: Method of fixing gas distributing pipeline: Fire extinguisher type:
S.64	<p>Use of Approved Cylinders Use of appropriate cylinders for specific gas</p>					
S.65	<p>Marking of Cylinders Cylinders appropriately colour coded (i.e. red - inflammable; yellow - poisonous; half red & half yellow - both)</p>					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 2 (Compressed Gases)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.66 & S.67	Cylinder Testing Examine record of cylinder testing by Authority & attach a copy C Permanent & liquefied gases - every 5 years C Dissolved gases - every 12 months					
S.72	Fire Precautions (1) No smoking (2) No naked light and heating equipment in store (3) No unapproved electrical equipment (4) Sign prohibiting smoking and use of naked lights in English and Chinese outside store					
S.73	Liquid Oxygen and Nitrogen Cylinder Storage (1) Storage of liquid oxygen or nitrogen in approved place marked by bilingual notice(s) (2) Handling of liquid oxygen and nitrogen by experienced personnel					
S.74	General Storage Provisions (2) Cylinder labelled as prescribed in the Schedule 1 of sub.leg.B in Cap.295 (3) Segregated storage of such gases listed at 1st column which exceed the quantity specified in 2nd column of table in S.74 of sub.leg.B in Cap.295 (4)(a) Cool storage away from direct sun and any heat sources (4)(b) Cylinders located below or >600 mm from burner (4)(c) Licensed storage area (4)(d) No storage in common passageway, stairway or doorway (4)(e) Stored above ground levels, except with permission (4)(f) Provision of adequate ventilation					Confirm with the table of section 74 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 3 (Corrosive Substances)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.81	<p>Licence (1) Examine licence to manufacture/store corrosive substance & attach a copy)</p> <p><i>Exempt if the quantity of such corrosive substances listed in the 1st column of table in S.84 of sub.leg.B in Cap.295 not exceeding that specified in the 7th column OR if the quantity of such corrosive substances listed in the 1st column not exceeding that specified in the 8th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i></p>					Registration No.: Business activity: Type of corrosive substance: Quantity: Confirm with the table of section 84 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.82	<p>Licence Conditions (a) Conformation of storage area construction with the approved plan</p> <p>(b) impervious flooring and walls for total spill retention</p>					Storage site: Material of construction:

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 3 (Corrosive Substances)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.83	Segregated Storage (1) Segregated storage of corrosive substances (2) No co-storage of incompatible substances (Column 1 & Column 2)**					
S.84	General Provisions Storage or conveyance of substances relating to: (1) Packing type as specified in the 2nd column of table in S.84 of sub.leg.B in Cap.295 (2) Minimum Air Space as specified in the 3rd column of table in S.84 of sub.leg.B in Cap.295 (3) Maximum quantity/net weight as specified in the 4th column of table in S.84 of sub.leg.B in Cap.295 (4) Outer packing type as specified in the 5th column of table in S.84 of sub.leg.B in Cap.295 (5) Appropriate labelling (bilingual as specified in the 6th column of table in S.84 & Schedule 1 of sub.leg.B in Cap.295					Confirm with the table of section 84 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)

* N/A - not applicable; Unk - Unknown

**

Column 1 Substances

Acetic Anhydride
 Hydrobromic Acid
 Hydrochloric Acid
 Hydrofluoric Acid
 Perchloric Acid

Column 2 Substances

Chlorosulphonic Acid
 Nitric Acid
 Perchloric Acid
 Sulphuric Acid (conc. or oleum)
 Nitric Acid
 Chlorosulphonic Acid
 Sulphuric Acid (conc. or oleum)

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 4 (Poisonous Substances)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.87	<p>Licence (1) Examine licence to manufacture/store poisonous substance & attach a copy</p> <p><i>Exempt if the quantity of such poisonous substances listed in the 1st column of table in S.92 of sub.leg.B of sub.leg.B in Cap.295 not exceeding that specified in the 7th column OR if the quantity of such poisonous substances listed in the 1st column not exceeding that specified in the 8th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i></p>					Registration No.: Business activity: Type of corrosive substance: Quantity: Confirm with the table of section 92 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.88	<p>Licence Conditions (a) Conformation of storage area construction with the approved plan</p> <p>(b) Provision of adequate ventilation</p>					Storage site: Material of construction: Means of ventilation:
S.89	<p>Store to be Kept Locked Entrance kept securely closed and locked</p>					
S.90	No person under age of 14 & unauthorised persons permitted in store					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) b _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 4 (Poisonous Substances)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.91	Segregated storage of poisonous substances					
S.92	<p>General Provisions Storage or conveyance of substances relating to:</p> <p>(1) Packing type as specified in the 2nd column of table in S.92 of sub.leg.B in Cap.295 (2) Minimum Air Space as specified in the 3rd column of table in S.92 of sub.leg.B in Cap.295 (3) Maximum quantity/net weight as specified in the 4th column of table in S.92 of sub.leg.B in Cap.295 (4) Outer packing type as specified in the 5th column of table in S.92 of sub.leg.B in Cap.295 (5) Appropriate labelling (bilingual as specified in the 6th column of table in S.92 & Schedule 1 of sub.leg.B in Cap.295</p>					Confirm with the table of section 92 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)

* N/A - not applicable; Unk - Unknown

ENVIRONMENTAL AUDIT PROTOCOL - DANGEROUS GOODS (CATEGORY 5) MANAGEMENT

This protocol does not cover the audit for conveyance and bulk storage of Category 5 dangerous goods (Substances Giving Off Inflammable Vapour).

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 5 (Substances Giving Off Inflammable Vapour)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.96	Licence (1) Licence to manufacture/store corrosive substance (Examine & attach a copy) <i>Exempt if the quantity of such substances listed in the 1st column of table in S.99 of sub.leg.B in Cap.295 not exceeding that specified in the 7th column OR if the quantity of such substances listed in the 1st column not exceeding that specified in the 8th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i>					Registration No.: Business activity: Type of corrosive substance: Quantity: Confirm with the attached table of section 99 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.97	Licence Conditions (a) Conformation of storage construction with the approved plan (b) Floors, walls, ceiling/roofing constructed of fire resisting materials (c) Surface of any part of store for liquid storage constructed of impervious material to totally retain spill (d) Adequate ventilation equipped with flame traps (e) Proper fitting and insulation of all electrical equipment (f) Isolation of store from sewer or drain (g) Equipped with appropriate fire extinguishing equipment (h) Notice (bilingual) and prohibition of smoking and naked lights					Storage site: Material of construction: Means of ventilation:
S.98	Segregated storage of substances giving off inflammable vapour					

* N/A - not applicable; Unk - Unknown

As of January 1997

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 5 (Substances Giving Off Inflammable Vapour)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.99	General Provisions Storage or conveyance of substances relating to: (1) Packing type as specified in the 2nd column of table in S.99 of sub.leg.B in Cap.295 (2) Minimum Air Space as specified in the 3rd column of table in S.99 of sub.leg.B in Cap.295 (3) Maximum quantity/net weight as specified in the 4th column of table in S.99 of sub.leg.B in Cap.295 (4) Outer packing type as specified in the 5th column of table in S.99 of sub.leg.B in Cap.295 (5) Appropriate labelling (bilingual as specified in the 6th column of table in S.99 & Schedule 1 of sub.leg.B in Cap.295					Confirm with the table of section 99 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.105	Fire Sited Near Store No fire or source of substantial heat within 6m of the store Exempt when it is approved by the Authority AND it is separated by an approved fire resisting wall Examine & attach a copy of permission					
S.106	Storage of Containers Stored >600mm from any wall or the ceiling Free air space >600mm if stored in stacks					
S.113	No person under age of 14 & unauthorised persons permitted in store					
S.114	Store to be Kept Locked Entrance kept securely closed and locked					

* N/A - not applicable; Unk - Unknown

This protocol is not applicable to the audit for storage of calcium carbide in Category 6 (Substances which become dangerous by interaction with water).

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 6 (Substances which become dangerous by interaction with water)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.136	<p>Licence (1) Examine licence to manufacture/store substance which become dangerous by interaction with water & attach a copy</p> <p><i>Exempt if the quantity of such substances listed in the 1st column of table in S.139 of sub.leg.B in Cap.295 not exceeding that specified in the 7th column OR if the quantity of such substances listed in the 1st column not exceeding that specified in the 8th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i></p>					Registration No.: Business activity: Type of substance: Quantity: Confirm with the attached table of section 139 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.137	<p>Licence Conditions (a) Conformation of storage construction with the approved plan (b) Store secured against entry of water (c) Equipped with appropriate fire extinguishing equipment</p>					Storage site: Material of construction: Means of ventilation:
S.138	Segregated storage of substances which become dangerous by interaction with water					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 6 (Substances which become dangerous by interaction with water)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.139	General Provisions Storage or conveyance of substances relating to: (1) Packing type as specified in the 2nd column of table in S.139 of sub.leg.B in Cap.295 (2) Minimum Air Space as specified in the 3rd column of table in S.139 of sub.leg.B in Cap.295 (3) Maximum quantity/net weight as specified in the 4th column of table in S.139 of sub.leg.B in Cap.295 (4) Outer packing type as specified in the 5th column of table in S.139 of sub.leg.B in Cap.295 (5) Appropriate labelling (bilingual as specified in the 6th column of table in S.139 & Schedule 1 of sub.leg.B in Cap.295					Confirm with the table of section 139 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.140	Specific Provisions Water not to be introduced into stores					
S.141	Containers to be kept closed					
S.142	Unauthorised persons not permitted in stores					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 7 (Strong Supporters of Combustion)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.150	<p>Licence (1) Examine licence to manufacture/store strong supporters of combustion & attach a copy</p> <p><i>Exempt if the quantity of such substances listed in the 1st column of table in S.153 of sub.leg.B in Cap.295 not exceeding that specified in the 7th column OR if the quantity of such substances listed in the 1st column not exceeding that specified in the 8th column of the table stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i></p>					Registration No.: Business activity: Type of substance: Quantity: Confirm with the attached table of section 153 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.151	<p>Licence Conditions (a) Conformation of storage construction with the approved plan (b) Equipped with appropriate fire extinguishing equipment</p>					Storage site: Material of construction:
S.152	Segregated storage of strong supporters of combustion					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 7 (Strong Supporters of Combustion)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.153	<p>General Provisions Storage or conveyance of substances relating to:</p> <p>(1) Packing type as specified in the 2nd column of table in S.153 of sub.leg.B in Cap.295 (2) Minimum Air Space as specified in the 3rd column of table in S.153 of sub.leg.B in Cap.295 (3) Maximum quantity/net weight as specified in the 4th column of table in S.153 of sub.leg.B in Cap.295 (4) Outer packing type as specified in the 5th column of table in S.153 of sub.leg.B in Cap.295 (5) Appropriate labelling (bilingual as specified in the 6th column of table in S.153 & Schedule 1 of sub.leg.B in Cap.295</p>					Confirm with the table of section 153 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 8 (Readily Combustible Substances)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.156	<p>Licence (1) Examine licence to manufacture/store readily combustible substance & attach a copy</p> <p>Exempt if the quantity of such substances listed in the 1st column of table in S.159 of sub.leg.B in Cap.295 not exceeding that specified in the 6th column OR if the quantity of such substances listed in the 1st column not exceeding that specified in the 7th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</p>					Registration No.: Business activity: Type of substance: Quantity: Confirm with the attached table of section 159 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.157	<p>Licence Conditions (a) Conformation of storage construction with the approved plan (b) Store of celluloid or film</p> <p>If negative, skip (i) to (v) of S.157</p> <p>(i) Floors, walls, ceiling/roofing constructed of fire resisting materials (ii) Self closing and outward opening door OR sliding door of store (iii) Store with no windows but fitted with an efficient explosion hatch (iv) Adequate ventilation equipped with flame traps (v) Word Acelluloid@or Afilm@(bilingual) displayed on the outside door of store</p>					Storage site: Material of construction:

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 8 (Readily Combustible Substances)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.158	(1) Segregated storage of readily combustible substances (2) Restriction on co-storage of incompatible substances**					
S.159	General Provisions Storage or conveyance of substances relating to: (1) Packing type as specified in the 2nd column of table in S.159 of sub.leg.B in Cap.295 (2) Maximum quantity/net weight as specified in the 3th column of table in S.159 of sub.leg.B in Cap.295 (3) Outer packing type as specified in the 4th column of table in S.159 of sub.leg.B in Cap.295 (4) Appropriate labelling (bilingual as specified in the 5th column of table in S.159 & Schedule 1 of sub.leg.B in Cap.295					Confirm with the table of section 159 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.161, S.163, S.164	No naked light, unprotected flame and smoking					
S.160	Storage of Celluloid (1) Store no more than 1 tone of celluloid or film					

* N/A - not applicable; Unk - Unknown

** Celluloid or nitrocellulose based film with any other goods

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 9 (Substances Liable to Spontaneous Combustion)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.167	<p>Licence (1) Examine licence to manufacture/store substance liable to spontaneous combustion & attach a copy</p> <p><i>Exempt if the quantity of such substances listed in the 1st column of table in S.170 of sub.leg.B in Cap.295 not exceeding that specified in the 6th column OR if the quantity of such substances listed in the 1st column not exceeding that specified in the 7th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i></p>					Registration No.: Business activity: Type of substance: Quantity: Confirm with the attached table of section 170 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.168	<p>Licence Conditions (a) Conformation of storage construction with the approved plan (b) Store with fire extinguisher</p>					Storage site: Material of construction: Type of fire extinguisher:
S.169	<p>Storage Segregated storage of substances liable to spontaneous combustion Segregated storage of cotton waste to any other dangerous goods in category 9</p>					

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 9 (Substances Liable to Spontaneous Combustion)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.170	<p>General Provisions</p> <p>(1) Packing type as specified in the 2nd column of table in S.170 of sub.leg.B in Cap.295</p> <p>(2) Maximum quantity/net weight as specified in the 3th column of table in S.170 of sub.leg.B in Cap.295</p> <p>(3) Outer packing type as specified in the 4th column of table in S.170 of sub.leg.B in Cap.295</p> <p>(4) Appropriate labelling (bilingual as specified in the 5th column of table in S.170 & Schedule 1 of sub.leg.B in Cap.295</p>					Confirm with the table of section 170 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)

* N/A - not applicable; Unk - Unknown

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Dangerous Goods (General) Regulation (Cap.295 sub.leg.B) - Category 10 (Other Dangerous Substances)

Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.173	<p>Licence (1) Examine licence to manufacture/store substance in category 10 & attach a copy</p> <p><i>Exempt if the quantity of such substances listed in the 1st column of table in S.176 of sub.leg.B in Cap.295 not exceeding that specified in the 7th column OR if the quantity of such substances listed in the 1st column not exceeding that specified in the 8th column stored solely for the use (i) in registered hospital or maternity home; (ii) in registered mental hospital; (iii) for practice of a registered medical practitioner; (iv) for practice of a registered dentist; (v) for business of an authorized poison seller; (vi) in any laboratory.</i></p>					Registration No.: Business activity: Type of substance: Quantity: Confirm with the attached table of section 176 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)
S.174	<p>Licence Conditions (a) Conformation of storage construction with the approved plan (b) Equipped with appropriate fire extinguishing equipment</p>					Storage site: Material of construction:
S.175	Segregated storage of Category 10 (other dangerous substances) substances					
S.176	<p>General Provisions Storage or conveyance of substances relating to: (1) Packing type as specified in the 2nd column of table in S.176 of sub.leg.B in Cap.295 (2) Minimum Air Space as specified in the 3rd column of table in S.176 of sub.leg.B in Cap.295 (3) Maximum quantity/net weight as specified in the 4th column of table in S.176 of sub.leg.B in Cap.295 (4) Outer packing type as specified in the 5th column of table in S.176 of sub.leg.B in Cap.295 (5) Appropriate labelling (bilingual as specified in the 6th column of table in S.176 & Schedule 1 of sub.leg.B in Cap.295</p>					Confirm with the table of section 176 in Dangerous Good (General) Regulation (Cap.295 sub.leg.B)

* N/A - not applicable; Unk - Unknown

This protocol covers the planning, construction, operation and/or decommissioning of a designated project.

Audit Site _____
 Audit Date _____
 Auditor(s) _____
 Site Personnel _____

Legislation: Environmental Impact Assessment (EIA) Ordinance (Cap.499)						
Reference	Requirements	Activity Compliance*				Comments/Remarks
		Yes	No	N/A	Unk	
S.5	Application for brief or permission to apply directly for environmental permit Any project covered in Schedule 2 or Schedule 3 of the EIA Ordinance requires: (1)(a) to apply for a Study Brief to proceed with an EIA study for the project; (1)(b) to apply for approval to apply directly for an environmental permit.					
S.8	Approval of environmental impact assessment report (5) Any approved EIA report of the designated project placed on the register. Examine any record of the report					Date of the report: Register reference no.:
S.9	Prohibition against carrying out designated project without environmental permit A designated project listed in Part I of Schedule 2 shall not be constructed or operated, or a designated project listed in Part II of Schedule 2 shall not be decommissioned: (1)(a) without an environmental permit for the project; or (1)(b) contrary to the conditions set out in the permit. Examine the environmental permit and attach a copy					Date of environmental permit: Permit reference no.:
S.26	Offences relating to environmental permit (1),(4) Offences are committed if a project is constructed, operated or decommissioned contrary to S.9. Examine the permit conditions and their required documents					Documents required in the permit (e.g. design/planning submissions, construction EM&A programmes, operational/decommissioning EM&A programmes, procedures for reporting environmental permit conditions implementation status, etc.):

N/A – not applicable; Unk - Unknown

- Executive Summary
- 1. Introduction
- 2. Audit Scope
- 3. Approach and Methodology
- 4. Audit Findings
- 5. Recommendations
- 6. Conclusion

Findings Category	Legislative Compliance	Conformity with Corporate Policies, Procedures & Guidelines	Good Environmental Practice Recommendations
Material Management			
Energy Management			
Waste Management			
Water & Wastewater Management			
Air Quality			
Noise Emissions			
Transportation & Travelling			
Emergency Response Procedures			
Staff Awareness & Training			
Response to Public Enquiries & Complaints			
Environmental Management Systems			

Implementation levels:

- [1] Relatively easy and simple to implement with minimal resource requirements
- [2] Require some planning and coordination at moderate expense and time commitment
- [3] Involve significant modification of existing system at high cost in protracted time period

Environmental Issue	Objective	Target	Action	Responsible Department	Personnel Responsible	Budget	Timescale for Implementation/ Completion
Material Management							
Energy Management							
Waste Management							
Water & Wastewater Management							
Air Quality							
Noise Emissions							
Transportation & Travelling							
Emergency Response Procedures							
Staff Awareness and Training							
Response to Public Enquiries and Complaints							
Publicity of Environmental Information							
Environmental Management Systems							