

Task Order No. 832
USAID Contract No. PCE-I-00-96-00002-00

**Egyptian Environmental Policy Program
Program Support Unit**

TRAINING COURSE
*Fundamental Techniques & Tools of
Environmental Management*

presented by

Harold van Kempen

November-December 2001

PSU-79

for

**U.S. Agency for International Development
Cairo**

by

**Environmental Policy & Institutional Strengthening
Indefinite Quantity Contract (EPIQ)**

A USAID-funded project consortium led by International Resources Group, Ltd.

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Fact Sheet

USAID Contract No.:	PCE-I-00-96-00002-00 Task Order No. 832
Contract Purpose:	Provide core management and analytical technical services to the Egyptian Environmental Policy Program (EEPP) through a Program Support Unit (PSU)
USAID/Egypt's Cognizant Technical Officer:	Holly Ferrette
Contractor Name:	International Resources Group, Ltd.
Primary Beneficiary:	Egyptian Environmental Affairs Agency (EEAA)
EEAA Counterpart:	Eng. Dahlia Lotayef Director – Planning, Follow-up & Technical Cooperation (PFTC) Department
EEPP Policy Objective:	Increased GoE capacity to conduct long-term strategic planning, policy formulation, analysis, and coordination
Work Assignment Title:	Improve capacity of EEAA PFTC Department personnel in understanding fundamental environmental management principles
Work Assignment Author:	Harold van Kempen
Work Assignment Supervisor:	N/A
Work Assignment Period:	November 2001

Preface

Through competitive bidding, the U.S. Agency for International Development (USAID) awarded a multi-year contract to a team managed by International Resources Group, Ltd. (IRG) to support the development and implementation of environmentally sound strategic planning, and strengthening of environmental policies and institutions, in countries where USAID is active. Under this contract, termed the Environmental Policy and Institutional Strengthening Indefinite Quantity Contract (EPIQ), IRG is assisting USAID/Egypt with implementing a large part of the Egyptian Environmental Policy Program (EEPP).

This program was agreed-to following negotiations between the Government of the United States, acting through USAID, and the Arab Republic of Egypt, acting through the Egyptian Environmental Affairs Agency (EEAA) of the Ministry of State for Environmental Affairs, the Ministry of Petroleum's Organization for Energy Planning, and the Ministry of Tourism's Tourism Development Authority. These negotiations culminated with the signing of a Memorandum of Understanding in 1999, whereby the Government of Egypt would seek to implement a set of environmental policy measures, using technical support and other assistance provided by USAID. The Egyptian Environmental Policy Program is a multi-year activity to support policy, institutional, and regulatory reforms in the environmental sector, focusing on economic and institutional constraints, cleaner and more efficient energy use, reduced air pollution, improved solid waste management, and natural resources managed for environmental sustainability.

USAID has engaged the EPIQ contractor to provide Program Support Unit (PSU) services to EEPP. The PSU has key responsibilities of providing overall coordination of EEPP technical assistance, limited crosscutting expertise and technical assistance to the three Egyptian agencies, and most of the technical assistance that EEAA may seek when achieving its policy measures.

The EPIQ team includes the following organizations:

- Prime Contractor: International Resources Group
- Partner Organization:
 - Winrock International
- Core Group:
 - Management Systems International, Inc.
 - PADCO
 - Development Alternatives, Inc.
- Collaborating Organizations:
 - The Tellus Institute
 - KBN Engineering & Applied Sciences, Inc.
 - Keller-Bliesner Engineering
 - Conservation International
 - Resource Management International, Inc.
 - World Resources Institute's Center For International Development Management
 - The Urban Institute
 - The CNA Corporation.

For additional information regarding EPIQ and the EEPP-PSU, contact the following:

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Chief of Party

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Abbreviations, Acronyms, and Glossary

COP	Chief of Party
CTO	Cognizant Technical Officer. This is the USAID person responsible for supervising a technical assistance contractor.
EEAA	Egyptian Environmental Affairs Agency
EEPP	Egyptian Environmental Policy Program (a USAID-funded program aimed at achieving a series of environmental policy reform performance objectives)
EEPP-PSU	Egyptian Environmental Policy Program, Program Support Unit
EPIQ	Environmental Policy and Institutional Strengthening Indefinite Quantity Contract. This is a contract issued by USAID's Global Bureau that enables environmental policy services to be provided to USAID missions worldwide.
GoE	Government of Egypt
IRG	International Resources Group, Ltd. (a Washington DC-based consulting firm that is prime contractor for USAID's EPIQ contract)
MOA	Memorandum of Agreement
MSEA	(Egyptian) Ministry of State for Environmental Affairs
MVE	Monitoring, Verification, & Evaluation (MVE is a the USAID-funded unit established to monitor, verify and evaluate progress of EEPP. It is being implemented by the US-based company Chemonics International)
OEP	(Egyptian) Organization for Energy Planning (attached to the Ministry of Petroleum)
PSU	Program Support Unit (the name of the USAID-funded contract that is to provide overall coordination for the EEPP, as well as provide technical assistance to EEAA under the EEPP)
TDA	(Egyptian) Tourism Development Authority (attached to the Ministry of Tourism)
USAID	U.S. Agency for International Development

1. Introduction

The governments of the United States of America, acting through the U.S. Agency for International Development (USAID), and the Arab Republic of Egypt, signed a Memorandum of Understanding in 1999 to implement the Egyptian Environmental Policy Program (EPPP). This program supports policy, regulatory, and institutional reforms to promote environmental quality and to protect natural resources. One of the Egyptian partners in EPPP is the Egyptian Environmental Affairs Agency (EEAA). Within the framework of EPPP, technical and other assistance to EEAA is being provided by the Program Support Unit (PSU), which was assigned by USAID to International Resources Group (IRG) under contract number OUT-PCE-I-832-96-00002-00.

In Tranche 2 of EPPP, under draft Policy Measure #6, the PSU is to provide assistance to help increase ... *GOE capacity to conduct long term strategic planning, policy formulation, analysis and coordination*. As part of this assistance, the PSU conducted a 2-module workshop for staff of EEAA's Planning Follow Up and Technical Coordination (PFTC) Department on fundamental techniques and tools of environmental management. The purpose of this training was to provide the young staff of this department, as well as their primary counterparts in other EEAA departments, with a comprehensive overview of environmental management principles.

2. Training Notes

2.1 Dates, Venue, and Participants

Training occurred once per week, for 2 hours each session, over the following period:

- Module 1: 7 & 13 November 2001
- Module 2: 20 & 28 November 2001
- Summary and Analysis: 4 December 2001

Training sessions were held in the 5th floor conference room at EEAA. Attendees at each session are listed in Appendix B.

2.2 Training Topic, Sessions, and Materials

The topic of training was an introduction to techniques and tools of environmental management, with Module 1 covering techniques and Module 2 dealing with tools.

The training sessions comprised a mixture of classroom instruction, assignment, and evaluation of assignments. The classroom instruction materials included overhead transparencies, which were also distributed to attendees. A copy of these materials is presented in Appendix C.

After several sessions, an assignment was issued, requiring participants to apply some of the techniques and tools discussed, and then report back at the next session. The three assignment topics were as follows:

1. Module 1 – Techniques:

For 3 of the 6 environmental management techniques [Group 1 is to address (i) environmental monitoring, (ii) government regulation, (iii) fiscal instruments. Group 2 is to address (iv) government planning, (v) business & enterprise initiatives, and (vi) public awareness and education]:

- *Identify and describe two successful Egyptian examples of each environmental management technique, and explain why you think the examples are successful.*
- *Identify and describe one or more situations where application of each technique in Egypt could be improved.*

2. Module 2 – Tools:

Plan and conduct an environmental (including energy) audit of the EEAA operations that are undertaken from your Maadi office premises (do not focus on the Nature Conservation Sector in Zamalek and protectorates). The environmental audit should include the 3 components of (i) pre-audit, (ii) on-site, and (iii) post-audit activities that are listed in your handout. The audit should consider, but not be limited to: energy & water consumption, supplies and consumables used by EEAA personnel, waste disposal (including paper, cans, glass, food, oil from vehicles, used furniture & equipment), toxic building materials (e.g., asbestos, paints containing lead), etc.

Prepare a presentation of the audit, including (i) description of pre-audit activities, (ii) findings of audit, and (iii) recommended corrective actions.

3. Module 2 – Tools

According to data from the Ministry of Energy and Electricity, Egypt currently has capacity to generate (supply) about 12,000 megawatts (MW) of electricity (at peak demand, or peak load). Over the next 10 years, the Ministry anticipates that an additional 14,000 MW of electrical generating capacity will be needed, in order to meet increased demand. To supply this demand, some 19 new electricity generating stations (power plants) will therefore need to be constructed and become operational (assuming each power station has a peak capacity of 750 MW). This means one new power plant about every 6 months.

Group 1 (programmatic EIA):

List and briefly describe important issues to be considered in a programmatic EIA that would evaluate a GoE program of having an additional 14,000 MW of electricity generated in Egypt over the next 10 years.

Group 2 (project EIA):

List and briefly describe important issues to be considered in an EIA for a single 750 MW power plant.

3. Conclusions

The training topic had been identified as an urgent priority by staff of the PFTC during a planning meeting held in mid October 2001. At the concluding session, PFTC staff commented that they found the training very beneficial. They would have liked more time to be allocated by the agency for them to better-investigate their allotted weekly assignments. This was not possible as a new environment minister had been appointed, who was requiring information that had placed an added workload on the department.

It was commented by two observers that the training contributed to an energizing of staff from the PFTC department, who were better-equipped to respond to information requests and perform environmental policy evaluations.

Appendix A

About the Trainer

Mr. Harold van Kempen has degrees in geography and environmental sciences, and over 25 years of international environmental management experience. He currently serves as Team Leader (Chief-of-Mission) of the USAID-funded *Egyptian Environmental Policy Program*, Program Support Unit, in Cairo. His previous experience includes serving as Team Leader on 18-month EU-funded project to strengthen the agency responsible for environmental inspection in Ukraine, and Team Leader for a 5-year USAID-funded Environment Policy & Technology Project in Ukraine, Belarus & Moldova.

He has managed and conducted a wide variety of environmental consulting assignments that involved environmental institutional strengthening, site selection, environmental impact assessments, environmental permit preparation, regulatory compliance, waste management, environmental planning, environmental policy analysis, and environmental training programs. He has implemented and managed baseline investigations of air, land, water and socio-economic resources, and assessed potential environmental impacts of construction and operation of resource development, industrial, commercial and property development activities. As a result, he has a broad knowledge and technical understanding of environmental disciplines as they relate to regulatory compliance requirements, permitting strategy and impact assessment. Mr. van Kempen has conducted environmental assignments for a wide variety of projects, including electrical power generation and transmission, oil and gas exploration and development, mining and mineral processing, water resource development, new city planning and development, nuclear waste storage and disposal, hazardous and solid waste management, new infrastructure (ports, roads, railways, pipelines) and commercial and industrial facilities.

Besides Egypt, Mr. van Kempen's professional activities have been undertaken in the United States, Australia, Ukraine, Belarus, Moldova, Botswana, Indonesia, India, Sri Lanka, and Pakistan.

Appendix B
Attendees

The following pages are the attendance sign-up sheets for the training course.

Appendix C
Training Handout Materials

Materials handed-out at the training course have been photo-reduced and presented on the following pages of this appendix.



**FUNDAMENTAL TECHNIQUES & TOOLS
OF ENVIRONMENTAL MANAGEMENT**
Module 1 – General Techniques

Presented by:
Harold van Kempen

Presented to:
Egyptian Environmental Affairs Agency
Planning, Follow-up & Technical Cooperation Department

7-14 November 2001

Slide 1

ENVIRONMENTAL MANAGEMENT TECHNIQUES - OVERVIEW

- ENVIRONMENTAL MONITORING
- GOVERNMENT REGULATION
- GOVERNMENT ENVIRONMENTAL & ECONOMIC POLICIES & INCENTIVES (FISCAL INSTRUMENTS)
- GOVERNMENT PLANNING
- BUSINESS & ENTERPRISE INITIATIVES
- PUBLIC AWARENESS & EDUCATION

Slide 2

ENVIRONMENTAL MONITORING

- ENVIRONMENTAL MONITORING IS THE PERIODIC SAMPLING AND TESTING OF MEDIA (AIR, WATER, SOIL) AND BIOTA TO RECORD AND ASSESS CHANGES (POSITIVE OR NEGATIVE) OVER TIME OF PRE-DETERMINED PARAMETERS
- RESULTS OF ENVIRONMENTAL MONITORING CAN BE USED BY DECISION-MAKERS TO MANAGE ENVIRONMENTAL QUALITY USING A VARIETY OF TECHNIQUES

Slide 3

GOVERNMENT REGULATION

- ENVIRONMENTAL QUALITY STANDARDS
- POLLUTANT RELEASE LIMITS
- POLLUTION CONTROL TECHNOLOGY REQUIREMENTS
- WASTE MANAGEMENT
 - Minimization
 - Disposal
- PENALTIES & FINES
- ENVIRONMENTAL IMPACT ASSESSMENT (to be discussed more in Module 2)

Slide 4

	GOVERNMENT ENVIRONMENTAL & ECONOMIC POLICIES & INCENTIVES
<ul style="list-style-type: none">• POLLUTION TAXES (e.g. carbon tax)• BUYING & SELLING "POLLUTION RIGHTS"• WASTE DISPOSAL FEES• PRICING WATER & ELECTRICITY AT ACTUAL COST OF SUPPLY (encourages resource conservation)• HAZARDOUS MATERIALS TAXES• GOVERNMENT PURCHASING OF ENVIRONMENTALLY PREFERRED PRODUCTS (e.g. recycled paper)	

Slide 5

	GOVERNMENT PLANNING (1)
<ul style="list-style-type: none">• LAND USE PLANNING & ZONING• RESOURCE ALLOCATION• RISK ANALYSIS	

Slide 6

	GOVERNMENT PLANNING (2) Land Use Planning & Zoning
<p>AIM: ALLOCATE PORTIONS OF LAND (AND SEA) TO SPECIFIC USES AND EXCLUDE OTHER USES</p> <p>TECHNIQUE: INVENTORY ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES, AND EXISTING USES, AND PROPOSE USES COMPATIBLE WITH ENVIRONMENTAL CARRYING CAPACITY AND EXISTING USES</p> <p>EXAMPLES: #1: RED SEA TOURISM DEVELOPMENT ON LAND CONTROLLED BY TOURISM DEVELOPMENT AUTHORITY #2: EXCLUDE INDUSTRIAL ENTERPRISES IN RESIDENTIAL AREAS</p>	

Slide 7

 **GOVERNMENT PLANNING (3)**
Resource Allocation

AIM:
RESOURCE ALLOCATION IS THE EFFICIENT MANAGEMENT, ALLOCATION, AND EXPLOITATION OF ENVIRONMENTAL RESOURCES (air, land, water, energy)

TECHNIQUE:
SYSTEMATIC EVALUATION OF COMPETING USES AND EXCESSIVE DEMAND FOR A LIMITED RESOURCE

EXAMPLE:
WATER SUPPLY FROM NILE RIVER (drinking, agriculture, industry, waste disposal, recreation, fish [food], transport, habitat). LIMITED RESOURCE, EXCESSIVE DEMAND

Slide 8

 **GOVERNMENT PLANNING (4)**
Risk Analysis

- **RISK ASSESSMENT:**
THE TECHNICAL ASSESSMENT OF TYPE & MAGNITUDE OF RISKS:
 - Safety Hazard Analysis
 - Human Health Risk Assessment
 - Ecological Risk Assessment
- **RISK MANAGEMENT:**
THE PROCESS OF EVALUATING, SELECTING, AND IMPLEMENTING APPROPRIATE RESPONSES IN ORDER TO CONTROL RISKS AND MITIGATE THEIR CONSEQUENCES

Slide 9

 **BUSINESS & ENTERPRISE INITIATIVES**

- ENVIRONMENTAL AUDITS (to be discussed more in Module 2)
- POLLUTION PREVENTION PROGRAMS (e.g. Dow Chemicals)
- ENVIRONMENTAL TECHNOLOGY & ENGINEERING (clean technologies)
- ENVIRONMENTAL GOODS & SERVICES VENDORS
- TOTAL QUALITY ENVIRONMENTAL MANAGEMENT (ISO 14000)
- LIFE-CYCLE ANALYSIS
- ECO-LABELING & ECO-MARKETING

Slide 10

	PUBLIC AWARENESS & EDUCATION
<ul style="list-style-type: none">• DISCLOSURE TO THE PUBLIC OF ENVIRONMENTAL DATA, ESPECIALLY POLLUTANT RELEASES AND MONITORED ENVIRONMENTAL QUALITY (Bhopal, India 1984)• CONSUMER PREFERENCE FOR ENVIRONMENTALLY PREFERABLE PRODUCTS• PUBLIC INVOLVEMENT IN ENVIRONMENTAL DECISION-MAKING• SCHOOL & UNIVERSITY COURSES, AND TRAINING FOR "ENVIRONMENTAL PERSONNEL" IN GOVERNMENT & INDUSTRY	



**FUNDAMENTAL TECHNIQUES & TOOLS
OF ENVIRONMENTAL MANAGEMENT**
Module 2 – Selected Tools

Presented by:
Harold van Kempen

Presented to:
Egyptian Environmental Affairs Agency
Planning, Follow-up & Technical Cooperation Department

20 & 27 November 2001

Slide 1



SELECTED ENVIRONMENTAL MANAGEMENT TOOLS

- ENVIRONMENTAL IMPACT ASSESSMENT (EIA)
A PREDICTIVE TOOL
- ENVIRONMENTAL AUDIT:
A REVIEW TOOL

Slide 2



ENVIRONMENTAL IMPACT ASSESSMENT (1)

WHAT IS AN EIA?

AN ENVIRONMENTAL IMPACT ASSESSMENT IS A DOCUMENT THAT PRESENTS A SYSTEMATIC AND INTER-DISCIPLINARY EVALUATION OF THE POTENTIAL EFFECTS OF A PROPOSED MAJOR ACTION, AND ITS PRACTICAL ALTERNATIVES, ON THE PHYSICAL, BIOLOGICAL, CULTURAL, AND SOCIO-ECONOMIC ATTRIBUTES OF A PARTICULAR GEOGRAPHIC AREA

Slide 3



ENVIRONMENTAL IMPACT ASSESSMENT (2)

WHAT IS THE EIA PROCESS?

THE EIA PROCESS IS THE MEANS WHEREBY ENVIRONMENTAL IMPACT ASSESSMENTS ARE USED TO HELP GUIDE DECISION-MAKERS AND THE PUBLIC IN MAKING AN INFORMED DECISION AS TO WHETHER A PROPOSED MAJOR PROJECT SHOULD BE UNDERTAKEN

WHAT IS AN EIA PROGRAM?

AN EIA PROGRAM IS WHERE A GOVERNMENT:

- Establishes and implements laws requiring the preparation and review of EIAs
- Delegates agencies responsible for ensuring that EIAs are prepared and reviewed
- Educates project proponents and the public about the need to prepare, review, and comment on EIAs

Slide 4



ENVIRONMENTAL IMPACT ASSESSMENT (3)

KEY CONSIDERATIONS IN THE EIA PROCESS:

- DETERMINE EIA SCOPE
- DEFINE PURPOSE AND NEED FOR A PROPOSED ACTION
- IDENTIFY AND DESCRIBE PROPOSED ACTION AND ALTERNATIVES:
 - Planning and design
 - Construction
 - Operation
 - Decommissioning
- DESCRIBE THE ENVIRONMENTAL SETTING:
 - Climate, Air Quality, Noise
 - Geology & Soils
 - Water Resources
 - Biological Resources
 - Land Use
 - Transportation
 - Socioeconomics
 - Community Infrastructure
 - Historic & Cultural Resources
 - Energy

Slide 5



ENVIRONMENTAL IMPACT ASSESSMENT (4)

KEY CONSIDERATIONS IN THE EIA PROCESS (Concluded):

- ASSESS IMPACTS:
 - Significance
 - Direct & Indirect
 - Adverse & Beneficial
 - Cumulative
- IDENTIFY "ENVIRONMENTALLY PREFERRED" ALTERNATIVE
- MITIGATE SIGNIFICANT ADVERSE EFFECTS
- MONITOR MITIGATION MEASURES
- REVIEW OF EIA BY REGULATORY AGENCIES AND THE PUBLIC

Slide 6



ENVIRONMENTAL IMPACT ASSESSMENT (5)

STRATEGIC vs PROJECT EIAs:

- STRATEGIC (OR PROGRAMATIC EIA):
 - Definition:**
A strategic, or programmatic, EIA is one prepared for a broad-scale development program.
 - Example:**
GoE program to promote tourism development and infrastructure in the Red Sea region
 - Issue:**
In Egypt, no formal mechanism exists to "trigger" preparation of a programmatic EIA

Slide 7

 ENVIRONMENTAL IMPACT ASSESSMENT (6)

STRATEGIC vs PROJECT EIAs (Concluded):

- **PROJECT EIA:**
 - Definition:
A project EIA is one prepared for a specific project.
 - Example:
A tourist hotel and marina in Marsa Alam
 - Issue:
 - Agencies may not be aware of need for EIAs to be prepared when granting approval for projects
 - Often, approval agencies do not share EIAs with EEAA for review and comment

Slide 8

 ENVIRONMENTAL AUDIT (1)

WHAT IS AN ENVIRONMENTAL AUDIT?

AN ENVIRONMENTAL AUDIT EXAMINES AN ENTERPRISE'S MANAGEMENT PRACTICES IN ORDER TO EVALUATE THE CONDITION OF ITS ENVIRONMENT (just like a financial audit is a review of the financial condition of an enterprise)

Slide 9

 ENVIRONMENTAL AUDIT (2)

WHY CONDUCT AN ENVIRONMENTAL AUDIT?

- AS PART OF A
 - VOLUNTARY
 - SYSTEMATIC, AND
 - OBJECTIVE

EVALUATION AND VERIFICATION BY AN ENTERPRISE OF ITS ENVIRONMENTAL MANAGEMENT PROGRAM

- IDENTIFY POTENTIAL ENVIRONMENTAL LIABILITIES IN ORDER TO INITIATE STEPS TO MINIMIZE SUCH LIABILITIES

Slide 10

 ENVIRONMENTAL AUDIT (3)

WHY CONDUCT AN ENVIRONMENTAL AUDIT ? (Concluded)

- REDUCE THE OPERATING COSTS OF AN ENTERPRISE, VIA PROCESS CHANGES, RESOURCE CONSERVATION, AND WASTE MINIMIZATION
- AS PART OF 'DUE DILIGENCE' AND DISCLOSURE FOR PROPERTY TRANSACTIONS, SO THAT A POTENTIAL BUYER AND LENDER BECOME AWARE OF POSSIBLE LIABILITIES ASSOCIATED WITH A PROPERTY

Slide 11

 ENVIRONMENTAL AUDIT (4)

BENEFITS OF AN ENVIRONMENTAL AUDIT:

- **INCREASED PROFITS:**
 - Cheaper waste disposal
 - Less raw material
 - Avoid penalties and fines
- **IMPROVED PUBLIC IMAGE:**
 - Attract and retain better employees
 - Increased consumer demand for product
- **IMPROVED OPERATIONS:**
 - Useful tool to monitor efficiency of operations
 - Increased staff morale

Slide 12

 ENVIRONMENTAL AUDIT (5)
ISO 14000 (i)

WHAT IS ISO 14000 ?

- INTERNATIONALLY RECOGNIZED VOLUNTARY STANDARDS FOR INDUSTRY, AIMED AT ENVIRONMENTAL PROTECTION
- PROVIDE GUIDANCE FOR DEVELOPING A COMPREHENSIVE APPROACH TO ENVIRONMENTAL MANAGEMENT
- THEY DO NOT INSTRUCT BUSINESS OWNERS HOW TO RUN THEIR BUSINESS, INSTEAD, THEY DEFINE MANAGEMENT PROCESSES TO BE FOLLOWED TO CONTROL THE IMPACT AN ENTERPRISE MAY HAVE ON THE ENVIRONMENT

Slide 13



ENVIRONMENTAL AUDIT (6)
ISO 14000 (ii)

SOME BASIC PRINCIPLES OF ISO 14000:

- THE ISO 14000 SERIES ADDRESSES ALL ENVIRONMENTAL MEDIA
- ISO 14001 IS THE STANDARD FOR *ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)*, WHICH REQUIRES THAT ENVIRONMENTAL AUDITS BE CONDUCTED AS PART OF OVERALL RESPONSIBLE CARE
- ISO 14010, 14011, & 14012 DEAL WITH ENVIRONMENTAL AUDITING METHODS

Slide 14



ENVIRONMENTAL AUDIT (7)

COMPONENTS OF AN ENVIRONMENTAL AUDIT:

- **PRE-AUDIT ACTIVITIES:**
 - Plan scope of audit
 - Design data collection
 - Assemble and brief audit team
- **ON-SITE ACTIVITIES:**
 - Inspections
 - Interviews and data review
 - Sample and analyze wastes
- **POST-AUDIT ACTIVITIES:**
 - Evaluate data
 - Recommend corrective actions
 - Implement corrective actions
 - Schedule next audit
