

**ENVIRONMENTAL AUDITING:
SOURCES OF INFORMATION AND TRAINING**

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Prepared for:

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PREFACE

This source guide to information and training on environmental auditing was prepared by Policy Planning & Evaluation, Inc., Vienna, Virginia, under contract No. 68-01-7252 for the Regulatory Innovations Staff, Office of Policy, Planning and Evaluation, U.S. Environmental Protection Agency.

This document was prepared for distribution to attendees at EPA's March 1988 "Environmental Auditing Conference for Federal Agencies". Any mention of organizations, products, or services described in this document should not be construed to constitute endorsement by EPA or Policy Planning & Evaluation, Inc. Further, neither EPA nor PP&E guarantee the quality of the products and services described in this document, nor that they will necessarily continue to be offered by the respective organizations.

All information on products, services, costs, etc. presented in this document are accurate, to the best of the authors' knowledge, as of March 1988. Any omission of environmental auditing organizations, products, or services are inadvertent and much regretted.

If you have comments on this document or wish to identify items for inclusion in any potential revisions of this document, please inform EPA's Regulatory Innovations Staff, PM-223, 401 M St., S.W., Washington, D.C. 20460.

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GENERAL INTRODUCTION

The purpose of this document is to provide a reference source for persons interested in acquiring training in or information on environmental auditing. The information in this document has been categorized into six areas:

- A. Training: Environmental auditing courses.
- B. Training: Environmental auditing seminars and presentations as part of larger conferences.
- C. Training: University certificate programs in environmental auditing.
- D. Professional Environmental Auditing Organizations: Organizations and associations devoted to environmental auditing.
- E. "Generic" Auditing: Sources of information and training on general auditing skills and techniques (usually focused on operations and financial auditing).
- F. EPA Sources of Information on Environmental Auditing.
- G. Periodicals: A publication devoted specifically to the field of environmental auditing.

A more detailed description about each area is presented at the beginning of the respective section.

The information for this document was obtained primarily from two sources: brochures and other materials released by the various organizations describing their products and services; and interviews with appropriate persons in those organizations. More information about organizations, products, or services may be obtained by contacting each organization directly. Addresses are provided.

Often we have borrowed phrases and terminology from the brochures because we felt they best described the focus of the services being offered. At the same time we have tried to be objective in describing each program or organization.

Any comments on this document can be directed to the Environmental Auditing Project, Regulatory Innovations Staff, Mail code PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460.

A. TRAINING: COURSES

This section describes various programs, courses, seminars, etc. offered by different organizations. Typically, each training program runs from between one to four days, has a fixed schedule, and is open to the public. In addition, many of the organizations offer in-house training programs at company or agency facilities. Costs for hotel accommodation or related expenses are not included in the registration fees.

Each program description in this section contains essentially the same type of information:

- Title of program, course, or seminar
- Source (organization) offering the training, with the address
- Profile of the training program
- Topics covered
- Schedule
- Faculty, and
- Cost.

Title: The Environmental Audit

Source: Federal Publications, Inc.
 1120 20th St., N.W.
 Washington, D.C. 20036

Profile

The course is a program of training in methods of planning, conducting, and using an environmental audit. Its purpose is to provide assistance to those involved in the process of designing and incorporating an audit system into the activities of their respective organizations. The course includes lectures and question-answer sessions. Course participants receive a copy of the book All About Environmental Auditing, by Ridgway M. Hall, Jr. and David R. Case, who are members of the course faculty.

Topics Covered

The course is divided into five main areas:

- "Reasons for an audit" discusses the role of audits as management tools to ensure cost-effective compliance; and the use of audits to prevent violations, even during periods of growth and expansion of the organization.
- "Planning the audit" discusses the criteria for selecting the members of the audit team, the scope of review and subjects to cover (such as regulatory requirements, maintenance procedures, and monitoring systems), and financial considerations.
- "Regulatory requirements" presents an overview of environmental controls, such as various federal, state, and local laws, permits, and compliance schedules; and outlines the implications of these controls on on-site compliance obligations for air emissions, water discharges, etc.
- "Conducting the audit" describes the process of obtaining information through the use of documents, questionnaires, interviews, and site visits; discusses aspects of confidentiality and how to protect it; and provides an audit checklist, highlights points of pollution discharge to inspect; and reviews aspects of maintenance procedures.
- "Using the audit" presents a systematic process of analyzing the results (including organizing the information and determining compliance); applying the results to determine, among other things, how costs may be reduced, and ways to limit potential liability; and coordinating compliance.

Schedule

The course is for two days and was last held in San Francisco on November 16-17, 1987, and in Washington, D.C. on October 15-16, 1987. No information is currently available on future courses.

Core Faculty

Ridgway M. Hall, Jr. is a partner in the Washington, D.C. law firm of Crowell & Moring.

David R. Case is an attorney in private practice, and is the General Counsel of the Hazardous Waste Treatment Council, a national trade organization.

Additional Faculty

The core faculty is supplemented by speakers with expertise in hazardous waste management regulation, and in the engineering and policy analysis aspects of industrial chemical waste management.

Cost

The registration fee is \$675. Course registrants receive a complimentary copy of the course text All About Environmental Auditing.

Title: Environmental Audits **Course:** Protecting Your Company and Yourself

Source: Government Institutes Inc.
966 Hungerford Drive, #24
Rockville, MD 20850

Profile

The purpose of the course is to teach managers and engineers how to audit their facilities for environmental compliance and protect themselves from liabilities. The course includes lectures and question-answer sessions. Course participants receive a copy of the book Environmental Audits, edited by Lawrence B. Cahill and Raymond W. Kane, who are also members of the course faculty.

Topics Covered

- "Current Federal & State Agency Activities in Environmental Auditing" presents auditing from a regulator's perspective; describes EPA's current policy on auditing; and reports on State activities in environmental auditing.
- "Legal Issues You Should Address Before and After the Audit" discusses the potential civil and criminal liabilities of the auditing company and the auditors; outlines current enforcement strategies and compliance issues; and addresses the problem of formulating a corporate policy on reporting violations.
- "Conducting the Audit--What Questions You Should Ask; What You Should Look For" reviews specific, common problems and compliance issues typically found during audits; uses case studies to point out problems.
- "Description and Comparison of Existing Industrial Audit Programs" surveys a variety of industrial programs; outlines both the differences and similarities in management approaches, policies, and procedures; and reviews complete software available for recordkeeping and reporting requirements.
- "Special Purpose Audits" defines the special audit needs and techniques for RCRA insurance; risk assessments; property sales and transfers; underground storage tanks; and off-site hazardous waste disposal vendors.

Schedule

The course is for two days and was last held in Washington, D.C. on March 8-9, 1988. The next course is tentatively scheduled for July 27-29, 1988 in Hilton Head, SC, and the subsequent one for October 20-21, 1988 in Washington, D.C.

Core Faculty

Lawrence Cahill is vice president of HART Environmental Management Corporation, an environmental management consulting firm.

Raymond Kane is also a vice president at HART.

Additional Faculty

The course also generally includes presentations by a lawyer, an EPA representative, and one or more corporate environmental managers.

Cost

The registration fee for the course is \$795, which includes a copy of the course text Environmental Audits.

Title: Mastering Environmental, Health, and Safety Auditing Techniques

Source: Arthur D. Little, Inc.
Center For Environmental Assurance
15 Acorn Park
Cambridge, MA 02140

Profile

The course is designed to train environmental, health, and safety (EHS) auditors in state-of-the-art auditing techniques and methodologies. This is an intensive, skills-oriented training course focusing on the practical aspects of conducting audits. The course is designed specifically for EHS professionals serving as audit team members, as well as for managers and attorneys. Course participants are provided with audit protocols, presentation summaries, and monographs on specific audit techniques. The course includes lectures and case studies.

Topics Covered

The course has four sections--reviewing the basics; understanding internal controls; gathering audit evidence; and reporting and critiquing the audit. Discussions include topics such as:

- "Overview of the Audit Process" presents the five fundamental audit steps: understanding management systems, assessing internal controls, gathering audit evidence, evaluating audit findings, and reporting exceptions.
- "Protocols and Questionnaires" provides participants the opportunity to develop plans for an EHS auditing case study.
- "Assessing Internal Controls" allows participants to review sample working papers to identify critical control points in facility EHS management systems.
- "Data-Gathering Techniques" puts participants in the roles of actual audit team members, and allows them to interact with key facility personnel to obtain information relevant to the completion of the case study.
- "Preparing the Audit Close-Out" is a session for audit teams to review and evaluate evidence gathered during the audit, and to develop a list of exceptions to present to facility management at the mock close-out meeting.
- "Difficult Audit Situations" discusses audit problems, alternatives for resolving conflicts, and reporting critical findings.

Schedule

The course is for four days and is offered 4-6 times per year. During 1988, courses are currently scheduled for April 26-29, July 12-15, September 13-16, and November 1-4.

Faculty

The course is conducted by members of the Arthur D. Little consulting staff.

Cost

The cost of the four-day course is \$795, which includes a complete set of course materials.

Title: Environmental, Health, and Safety Auditing: New Direction/New Strategies

Source: Arthur D. Little, Inc.
Center For Environmental Assurance
15 Acorn Park
Cambridge, MA 02140

Profile

This seminar is designed to provide environmental, health, and safety (EHS) professionals (including audit program managers, auditors, attorneys, and other interested parties) with the tools to critically evaluate and update their organization's EHS audit program or plans. Participants are provided with audit protocols, presentation summaries, and related material. The course consists primarily of lectures.

Topics Covered

- "Context for New EHS Auditing Directions" discusses the changing focus of EHS audits, and ways to meet the needs of top management through an audit program.
- "Methods for Enhancing Audit Program Effectiveness" describes ways to create audit program independence within the organization; ways to balance key audit program elements to ensure program effectiveness; and characteristics of leading audit programs.
- "Strategies for Increasing the Quality of EHS Audit Field Work" focuses on mastering basic audit skills; developing effective internal procedures and standards; and understanding key principles and techniques for writing audit reports.
- "Emerging Issues in EHS Auditing" introduces issues such as auditing overseas locations, auditor certification and liability, and special purpose audits.
- "Future Trends in EHS Auditing" discusses what auditing may be like in the 1990's, and the changing focus to management system audits.

Schedule

The seminar, called an "executive briefing", is for one day, and is held 4-6 times per year at locations across the United States and Canada. It was last held on December 10, 1987 and the next course is scheduled for April 14, 1988 in Cambridge, MA.

Training

Faculty

The course is conducted by members of the Arthur D. Little consulting staff.

Cost

The registration fee is \$495, which includes all program materials.

Title: Environmental, Health, and Safety Auditing: Advanced Skills and Techniques

Source: Arthur D. Little, Inc.
Center for Environmental Assurance
15 Acorn Park
Cambridge, MA 02140

Profile

This course is specifically designed for environmental, health, and safety auditors who have either attended Arthur D. Little's four-day basic audit skills and techniques course, or have at least two years' experience as full-time auditors. This advanced training program is an interactive course that focuses on enhancing auditors skills and techniques, and allows auditors to refine their auditing approach. Course participants are provided with a training manual, presentation summaries, and monographs on specific audit techniques. The course includes lectures, small group discussions, role playing, and other exercises.

Topics Covered

This course is divided into five sections--refining interviewing skills, developing working papers, selecting samples, formulating accurate findings, and enhancing team leadership skills.

Schedule

The two-day course is next scheduled for June 14-15, 1988 in Cambridge, MA.

Faculty

The course is conducted by senior members of Arthur D. Little's consulting staff, and by several industrial auditing professionals.

Cost

The cost of the course is \$595, which includes a complete set of course materials.

Title: Environmental Compliance Audits and Due Diligence

Source: Center for Professional Advancement
P.O. Box H
East Brunswick, NJ 08816

Profile

The course is designed to provide a working knowledge of the environmental audit process. There is special emphasis on the implications for real estate and other business transactions, permitting, and selection of waste management facilities. It focuses on practical information on design of the audit, organizational approaches to facilitate the audit, and data acquisition and evaluation. The course is intended for a wide range of participants including engineers, scientists, attorneys, and environmental managers. It consists primarily of lectures.

Topics Covered

- "Resource Conservation and Recovery Act" discusses issues pertaining to permitting and compliance, hazardous waste handling and storage, documentation and record keeping, evaluating haulers, and audits of off-site facilities.
- "Water and Air" focuses on NPDES and air permitting requirements, and includes a discussion on recent developments in toxics regulation.
- "Superfund" covers hazardous substance releases, investigations, remedial options, SARA, risk assessment, cost estimates, and using audits as a tool to identify and minimize risks.
- "Real Estate and Business Transactions--Due Diligence and Allocating the Risks" presents the concept of due diligence from both the seller's and the buyer's perspective. It also discusses how to allocate risks, and SEC disclosure issues.
- "Compliance Audits--Practical Guides" outlines: EPA guidelines for audits; roles of a company's management and staff in an audit; interview and questionnaire responses; and confidentiality and privilege issues.

Schedule

The course is for three days and was last held in East Brunswick, NJ, on September 14-16, 1987. The next course has not been

scheduled yet, but is expected to be scheduled for September 1988 at the same location. The course curriculum and faculty members are also expected to be the same.

Core Faculty

Dr. James H. Clarke is President of AWARE Inc. in Nashville, TN

Bryant C. Danner is a partner in the law firm of Latham & Watkins, which has offices in several cities, including Washington, D.C.

Additional Faculty

The course also includes presentations by other lawyers and environmental managers.

Cost

The course registration fee is \$830, which includes course notes.

Title: Environmental Auditing: Risk Management for the Future

Source: University of Wisconsin--Madison
Department of Engineering Professional Development
432 North Lake Street
Madison, WI 53706

Profile

The course is designed for environmental managers, attorneys and consultants who deal with environmental risks, regulators, and insurance professionals. No prior auditing experience is necessary. The course is a joint effort between the University of Wisconsin--Madison and the Institute for Environmental Auditing (described in this document's section on professional organizations).

Topics Covered

- Guidelines for developing an environmental auditing program
- Using auditing checklists
- Liability and legal responsibilities of auditing
- Conducting specialty audits for underground storage tanks, waste minimization, and environmental impairment liability insurance

Schedule

The course is for two days and is planned for June 7-8, 1988 at the University of Wisconsin, Madison.

Faculty

Courses are taught by the following guest speakers:

- Frank Priznar, Booz, Allen & Hamilton, Bethesda, MD.
- Bill Gullledge, Environmental Insurance Management, McLean, VA.
- John Palmisano, AER*X Division, RMT Inc., Washington, D.C.
- John Laumer, National Safety Council, Chicago, IL.
- Mary Morningstar, Jellinek, Schwartz, & Connolly, Washington, D.C.
- Victor Young, ARCO, Los Angeles, CA.

Cost

The registration fee is \$485.

B. TRAINING: SEMINARS AND PRESENTATIONS

The courses described in the previous section are offered exclusively as training packages in environmental auditing. In contrast, the programs described in this section are presented in conjunction with, or as part of, a larger conference in a related professional field. In addition, every year professional and environmental organizations sponsor conferences where the primary focus is not environmental auditing, but which sometimes include a session on auditing. Examples of such organizations and their addresses are:

1. **Water Pollution Control Federation**
601 Wythe Street
Alexandria, VA 22314-1994
2. **Air Pollution Control Association**
Box 2861
Pittsburgh, PA 15230-2861
3. **American Institute of Chemical Engineers**
345 East 47th Street
New York, NY 10017
4. **Hazardous Waste Treatment Council**
1440 New York Avenue, N.W., Suite 310
Washington, D.C. 20005
5. **HAZTECH International**
13555 Bel-Red Road
C-96870
Bellevue, WA 98009
6. **HazMat Central**
c/o Tower Conference Management Co.
800 Roosevelt Road, Bldg. E--Suite 408
Glen Ellyn, IL 60137-5835
7. **National Association of Environmental Professionals**
P.O. Box 9400
Washington, D.C. 20016

Title: Environmental Auditing Applications

Source: HAZMACON 88
c/o Association of Bay Area Governments
P.O. Box 2050
Oakland, CA 94604-2050

Profile

"Environmental Auditing Applications" is one of the training seminars being presented at HAZMACON 88. HAZMACON is a conference and exposition on hazardous materials management that features lectures, exhibits and training seminars, and is sponsored by the Association of Bay Area Governments.

The seminar, which is presented by the University of California at Irvine, reviews and demonstrates the principles of environmental auditing and examines emerging areas where auditing may be valuable. The seminar also involves a practical exercise in devising an auditing strategy for a specific case. Results of the case study are presented and evaluated by student teams.

The seminar has applications ranging from evaluating the safety of real estate transactions of industrial property to establishing risk, hazards, and liabilities of using hazardous materials in manufacturing.

Schedule

Although HAZMACON is for three days, the seminar on environmental auditing is for one day only. Hazmacon is to be held in Anaheim, CA on April 5-7, 1988, and the seminar, along with other training workshops, is to be held a day earlier on April 4.

Faculty

Dr. R. Nichols Hazelwood is the Director of Environmental Programs, IT Corp., Irvine, CA.

Vinay Dighe is with Occidental Petroleum Corp., Los Angeles, CA.

Cost

The fee for the seminar is \$115.

Title: Waste Minimization & Environmental Programs within DOD

Source: American Defense Preparedness Association
Rosslyn Center, Suite 900
1700 N. Moore Street
Arlington, VA 22209-1942

Profile

The symposium deals with hazardous waste minimization issues and the implementation of environmental programs at Department of Defense installations. It focuses on the concerns and problems faced by DOD installations in anticipating and complying with regulatory requirements. The symposium is intended as a forum for the government and the private sector to share ideas, to exchange information on operations, and to share solutions to common concerns.

The symposium is meant for persons from government and industry, from both professional and technical fields. Such fields include funding, planning, identifying, and designing -environmental programs; and handling, storing, transporting, and minimizing materials that present environmental hazards.

Topics Covered

Among the topics discussed are environmental audits for the Army's industrial base, Army, Navy, Air Force and Defense Logistics Agency environmental programs, waste minimization initiatives, and water quality assessments of DOD installations.

Schedule

The symposium is for three days and was last held on April 28-30, 1987 in Long Beach, California. The next symposium is tentatively scheduled for October 19-21, 1988 in New Orleans, Louisiana. The topics are expected to be the same.

Faculty

The faculty is comprised of guest speakers from various agencies and organizations, including the EPA, the Navy, the Army, the U.S. Congress Office of Technology Assessment, and a number of private consulting firms.

Cost

The registration fee for the 1987 symposium was \$235 for ADPA members, and \$255 for non-members (this includes membership to ADPA). The fee for members of the U.S. Government and academia was \$125. No information is available on the fee for 1988.

C. TRAINING: UNIVERSITY CERTIFICATE PROGRAMS

One training program in environmental auditing is currently offered for academic credit. That program is described in this section. The program is structured differently from the other programs described in the earlier sections. It has courses of longer duration, each offered in sessions that coincide with the university academic quarters. Furthermore, the program leads to a certificate of proficiency in environmental auditing.

Title: Certificate Program in Environmental Auditing

Source: University of California, Irvine
University Extension
P.O. Box AZ
Irvine, California 92716

Profile

The program is designed to expand the knowledge and management skills of environmental professionals in environmental auditing. The program provides both theoretical and practical information, and is oriented towards imparting to program participants the skills necessary to perform environmental audits.

The program is run like other university academic programs: the curriculum is spread over several months, with each course within the program normally being offered during a different quarter of the school year, and each participant is graded at the course conclusion.

Each of the four courses in environmental auditing is for 30 hours and contributes to 3 units of credit. In addition, because the Certificate Program in Environmental Auditing builds on courses already established in the closely related Certificate Program in Hazardous Materials Management, two courses from the latter program are prerequisites for enrollment in the environmental auditing program.

Persons interested in the program may opt either to complete the 180 course hours (six 3-unit courses) required for the certificate, or simply to take one or more courses without completing the requirements for the certificate.

Sample Topics

- "Introduction to Environmental Auditing" deals with the basic theories of environmental auditing. The audit process is described, methods for defining environmental audit goals and boundaries are developed, and techniques are presented.
- "Audit Skills and Techniques" covers methods for planning, conducting, evaluating, and reporting on environmental audits. Includes case examples and structured role-playing, and discussions on topics such as modifying protocols, data gathering techniques, interviewing, and reporting findings.
- "Audit Systems Design and Tools" presents criteria for environmental auditing systems design, and discusses how

auditing tools are developed for specific situations. This is done through case studies, with audit examples being chosen from industrial, business, and government operations.

- "Seminar in Environmental Auditing" presents specific, unique examples of actual audits, and examines the basic environmental principles that underlie environmental compliance efforts. The objective is to develop and define auditable standards by which environmental compliance management can be assessed.

Schedule

Each course is for about five weeks, with sessions once a week for six hours each, totalling 30 hours. The last course to be held was "Introduction to Environmental Auditing" (February 22 through March 28, five Mondays, 2-5 p.m. and 6:30-9:30), and classes were held in Fountain Valley, near Irvine. The schedule for future courses is not currently available.

Core Faculty

R. Nichols Hazelwood, Director of Environmental Programs, IT Corporation, teaches "Introduction to Environmental Auditing". The names of instructors for the other courses are not currently available.

Cost

The registration fee for each course is \$250. In addition, candidates must pay a nonrefundable fee of \$25 with an Application for Candidacy upon entering the program. The registration fee does not include the cost of the text Environmental Auditing: Fundamentals and Techniques, by J. Ladd Greeno, Gilbert S. Hedstrom, and Maryanne DiBerto, which is \$60.

D. PROFESSIONAL ORGANIZATIONS AND ASSOCIATIONS

This section describes three organizations dedicated solely to the practice and professional development of environmental auditing.

The organizations are primarily forums for the dissemination of information on environmental auditing, and present opportunities for members to interact with professionals in government, industry, law, etc. Membership to any of the organizations is open to all interested professionals.

The type of information presented for each organization in this section is essentially the same:

- Name and address of the organization
- A description of the organization's activities, such as meetings, conferences, and training programs
- Publications
- Profile of participants
- Organizational structure, and
- Membership and other costs.

Organization: Environmental Auditing Roundtable

Address: P.O. Box 23798
L'Enfant Plaza Station
Washington, D.C. 20026-3798

Background

The Environmental Auditing Roundtable (EAR) is an organization dedicated to furthering the development and professional practice of environmental auditing. It serves primarily as a forum for sharing information. It was founded in 1982 by several managers of corporate environmental audit programs.

Activities

- **Quarterly meetings:** EAR members conduct two-day meetings every quarter, generally in the Washington, D.C. area. Meeting agendas typically include a description of a corporate audit program; formal presentations on various auditing topics; group exercises; and informal discussions.
- **Work groups:** EAR members engage in informal sessions to exchange information and facilitate in-depth discussions on topics such as audit system design, audit procedures, auditor qualifications, international audits, legal issues, and computer applications.
- **Committees:** Members can volunteer for standing committees on EAR programs, communications, nominations, finance, training and education, and membership; or ad hoc committees addressing specific issues of interest to members.

Sample Agenda Topics

Recent EAR meetings have included presentations, discussions, and written material on: environmental auditing programs and practices; regulatory agency policies; requirements for audits in enforcement actions; auditing community right-to-know requirements under SARA Title III; federal agency audit programs; internal reporting of audit findings; auditor education, auditor certification, and audits for real estate transactions.

Publications

- **Publications on environmental auditing programs, practices, and issues** are frequently available at EAR meetings or from EAR participants and speakers.
- **Highlights of each meeting** are sent to members.

Profile of Participants

Most EAR members are practicing environmental, health, and safety auditors with extensive field experience. However, membership is open to anyone with a professional interest in the practice of environmental auditing. Members represent a wide variety of professional disciplines and organizations, including industry, consulting firms, government agencies, and law firms.

Organizational Structure

Membership in the Roundtable is open to all environmental auditors and other interested professionals. The officers of the organization are the five Directors, elected pursuant to the EAR's by-laws to constitute the Board of Directors. The Board establishes administrative policies, and among its members are the Chairperson and Treasurer. The Board allocates the duties and responsibilities to perform the administrative functions of the organization. These functions are performed by several committees that have been established as a permanent part of the organization. Members are governed by by-laws and a code of ethics.

Membership and Other Fees

Members pay an initiation fee of \$35 to join the Roundtable. In addition, members wishing to attend the quarterly meetings pay a fee usually of \$35 per meeting to cover luncheon costs, meeting room and audio-visual equipment rentals, etc.

Organization: Institute for Environmental Auditing

Address: P.O. Box 23686, L'Enfant Plaza
Washington, D.C. 20026-3686

Background

The Institute for Environmental Auditing (IEA) is an organization dedicated to the enhancement of the environmental auditing profession. Its goals are to provide a forum for education for auditors, and to establish the professional status of those engaged in the field. The IEA was chartered in 1987.

Activities

- **Meetings:** The IEA has active chapters in several states in the U.S., which conduct periodic meetings.
- **Training:** The IEA is in the process of developing a training program in environmental auditing-fundamentals. With the Air Pollution Control Association the IEA will present one-day training sessions in several locations. A second, more extensive two-day course is also being developed in association with the University of Wisconsin's Department of Engineering Professional Development.
- **Other:** Members of IEA contribute to State regulatory initiatives and present position papers on environmental auditing.

Publications

The IEA publishes a quarterly newsletter called "Working Papers" for its members. It includes environmental auditing articles and news, and information on training programs, employment opportunities, and publications related to environmental auditing.

Profile of Participants

Membership is open to all interested professionals. These include professionals from the fields of consulting, engineering, law, and finance, as well as from regulatory agencies.

Organizational Structure

The IEA is a non-profit organization incorporated in Washington, D.C., whose membership is open to all interested professionals.

Prof'l Organizations

The organization consists of a board of directors, an executive director, an administrative committee (responsible for finances, membership, correspondence, and business), and an activities committee (responsible for newsletters, local chapter support, training, and conferences). The IEA has five chapters--the Rocky Mountain, Pacific Northwest, New York State, Atlanta, and Mid-Atlantic chapters.

Membership and Other Fees

Members pay an annual fee of \$50, which entitles members to the newsletter, to attend meetings, and discounts on any future publications. Fees for seminars vary according to the type of seminar being sponsored.

Organization: Environmental Auditing Forum

Address: c/o Mr. Vinay Dighe
Occidental Petroleum
10889 Wilshire Blvd., Suite 1160
Los Angeles, CA 90024

Background

The two goals of the Environmental Auditing Forum (EAF) are to provide opportunities for the exchange of ideas and information about environmental auditing concepts, principles, and practices; and to facilitate development of improved environmental auditing and protection programs. EAF was founded in 1986 to better serve the needs of interested persons in California.

Activities

- **Meetings:** The EAF generally meets quarterly, usually in California; and meetings typically consist of presentations and group discussions. A meeting agenda usually covers three main areas:
 - A discussion of an actual audit program implemented by a company.
 - A discussion of enforcement issues at the federal and state level, initiated by a member from the government.
 - An update on legislative activities that may affect the field of environmental auditing, especially in California.

Publications

Meeting attendees receive minutes of the EAF meetings.

Profile of Participants

EAF meeting attendees represent industry, construction, government, consulting, insurance, and banking.

Organizational Structure

The EAF is governed by a five-member steering committee. In addition, there is an informal advisory committee that drafts issues for the steering committee to develop policy positions.

Prof'l Organizations

Membership and Other Fees:

Individuals are required to pay a fee of \$10 per year to be included on the mailing list for information on activities. Registration fee for meetings is \$30, which covers the cost of a luncheon, equipment and room rental, etc.

E. "GENERIC" AUDITING

This section presents information on organizations and training programs for auditing other than environmental auditing. Because the principles of auditing, whether financial auditing, operations auditing, or environmental auditing, are basically the same, this section may help the reader to put environmental auditing in perspective with other types of auditing. Also, some skills learned from one type of audit training are often applicable to other types of audits.

Although only two organizations have been described in this section, information on training programs for "generic" auditing skills and techniques may be available from various Federal audit agencies. These training programs will probably focus on financial or operations auditing, and may be available only to employees of the same agency. Examples of such agencies, and their addresses are:

- **Air Force Audit Agency**
Headquarters
AFAA/DA, Building 528
Norton Air Force Base, CA 92409-6001
- **Army Audit Agency**
HQDA (SAAG-PRP)
3101 Park Center Drive
Alexandria, VA 22302-1596
- **General Accounting Office**
Training Center, Room 7424
441 G St., N.W.
Washington, D.C. 20548

Organization: The Institute of Internal Auditors

Address: 249 Maitland Ave., P.O. Box 1119
Altamont Springs, FL 32701

Background

The Institute of Internal Auditors (IIA) is an international professional organization to promote the dissemination of knowledge in the area of internal (primarily financial) auditing. It consists of more than 30,000 members in 102 countries, with 180 chapters and affiliates worldwide. It was founded in 1941 in New York.

Educational Programs

- Three to five day seminars range from basics, such as techniques for the beginning financial or operations auditor, to specialized subjects such as internal auditing for the oil and gas industry.
- Special interest conferences address topics that have broader impact on the profession of internal auditing. Recent conferences have focused on telecommunications, fraud, contract and construction auditing, internal auditing in government, and relevant legislation. No courses are offered specifically on environmental auditing.
- IAA Media-Assisted Training Programs include video-assisted seminars, audio cassettes, self-study programs, and in-house training.

Conferences

Annual international and regional conferences give members opportunities to meet and share perspectives with people in disciplines such as government, industry, construction, and finance.

Certified Internal Auditor Program

The program is designed to enhance recognition of internal auditing and provide the proper direction to internal auditors who seek to further their professional development and advancement. Members are certified after being tested, and certification is considered a mark of professional achievement and commitment.

Publications

- The IIA publishes a journal, "Internal Auditor", which has up-to-date information on auditing practices and techniques.
- A newsletter, "IIA Today", provides news on internal auditing and highlights chapter activities.
- A manual, "Professional Internal Auditing Standards Volume", defines the criteria by which the operators of an internal auditing department are to be evaluated.
- A software package, "auditMASTERPLAN" incorporates the IIA's "Standards" (as defined in the manual), and is based on the book "Planning for the Internal Audit Function".

In addition, various publications on internal auditing, which are not published by the IIA, are also available for sale to members.

Cost

Membership costs vary for management level and for staff level members. Managers pay annual dues of \$110 plus a one-time application fee of \$15; staff members pay annual dues of \$60 plus the \$15 application fee. These fees includes subscriptions to the bi-monthly journal "Environmental Auditor" and to the newsletter "IIA Today"; and entitles the member to reduced rates for seminars, conferences, and publications. Costs of seminars and conferences vary from \$545 to \$845 for members and \$595 to \$895 for nonmembers.

Organization: International Loss Control Institute

**Address: Highway 78
P.O. Box 345
Loganville, GA 30249**

Background

The International Loss Control Institute is an organization whose primary function is to offer courses related to safety and loss control. These are designed to help a company or agency improve their efficiency, protect their resources, and reduce their costs. In addition, the ILCI offers on-site training, auditing and consulting services, training packages, and books, films, and videotapes on a variety of related subjects.

Courses

The ILCI offers eight courses on subjects such as safety management, loss control management, and resource management. Of particular interest are two courses for safety auditors:

- "Accredited Safety Auditors Course" presents methods and techniques of safety program management auditing, including interviews, examination of records, and inspections; reviews critical terminology and program requirements to assure consistency within the International Safety Rating System; and defines the activities involved in managing a safety and health program.
- "Accredited Safety Auditors Review Course" is designed to update Accredited Safety Auditors' knowledge and skills related to the International Safety Rating System; and to provide practical tools that can aid auditors in implementing effective loss control programs in their respective organizations.

Schedule

The duration of the eight courses varies from two to five days. The first auditors course is for five days and the auditors review course is for three days. Most of the courses, including the two on auditing, are offered several times a year and at different locations.

Cost

The registration fee is different for each course, and varies from \$342 to \$750 for ILCI members, and \$380 to \$950 for non-members.

Other Services

- The ILCI can tailor their courses to the specific needs of an organization.
- The ILCI's Membership Program allows organizations to benefit from the International Safety Rating System, particularly in terms of establishing health and safety standards, measuring and evaluating the effectiveness of the health and safety program, and correcting deficiencies.
- The ILCI's auditing and consulting services include comprehensive evaluations of the effectiveness of health and safety programs, and identification of program activities contributing to safety and loss control.
- The ILCI offers reference manuals, computer software for management, books, training packages, reports, periodicals, films, and videotapes.

F. EPA SOURCES OF INFORMATION ON ENVIRONMENTAL AUDITING

Information on environmental auditing is available from several offices in the EPA as well as from a number of documents published by the EPA. Three EPA offices, with their mail codes and telephone numbers, are listed below. All are located at 401 M Street, S.W., Washington, D.C. 20460.

1. Office of Federal Activities, A-104
Federal Facilities Compliance Staff (202) 382-3270
2. Office of Enforcement and Compliance Monitoring, LE-133
Compliance Policy Planning Branch (202) 382-7550
3. Office of Policy, Planning and Evaluation, PM-223
Regulatory Innovations Staff (202) 382-2726

Publications available from the EPA under various categories are:

A. Policy and Guidance

1. "Environmental Auditing Policy Statement", Federal Register Vol. 51, No. 131, Wednesday, July 9, 1986, pp. 25004-25010.
2. "Final EPA Policy on the Inclusion of Environmental Auditing Provisions in Enforcement Settlements", November 1986.

B. Bibliographies

1. Annotated Bibliography on Environmental Auditing, March 1988.

C. Protocols

1. Environmental Audit Protocol for EPA Facilities, November 1986.
2. Multi-Media Compliance Audit Procedures, June 1987.

D. Reports and Case Studies

1. "Study of the Benefits of Environmental Auditing Provisions in Enforcement Settlements", March 1988.
2. "Current Practices in Environmental Auditing", February 1984.
3. "Duties to Report or Disclosure Information on the

564-2440
564-2530
Planning
&
Policy
analysis

EPA Sources

**Environmental Aspects of Business Activities",
September 1985.**

- 4. "Benefits of Environmental Auditing: Case Examples",
December 1984.**

In addition, the Office of Federal Activities is planning to publish materials on environmental protocols and guidelines on environmental auditing program design for Federal agencies. These materials may be available late in 1988.

G. PERIODICALS

Articles on environmental auditing regularly appear in professional journals, magazines, and other periodicals. In addition, one journal is devoted to the applied practice of environmental auditing. That journal is discussed in this section.

Periodicals

Name: Environmental Auditor
Source: Springer International
Springer-Verlag New York, Inc.
175 Fifth Avenue
New York, NY 10010

Objectives

The journal is dedicated to serving all professionals interested in environmental auditing. Its goals are to encourage the use of environmental auditing as a means of achieving and maintaining compliance with environmental requirements; to evaluate the effectiveness of environmental management systems; to assess risks; and to identify and correct environmental hazards.

The journal's thesis is that through environmental auditing, businesses can anticipate pollution control problems and related environmental concerns, rather than being forced to react to crises as they occur. A typical issue will examine legal, scientific, and economic problems and solutions, and raise environmental issues for further analysis.

Frequency

The first issue is expected to appear in May 1988. Four issues per year are planned. Persons interested in subscribing to the journal can get more information from the address above.

Contributions

Persons interested in contributing manuscripts to the journal may contact the editors at:

ENVIRONMENTAL AUDITOR
P.O. Box 3818
Hartford, CT 06103
(203) 528-9677

Cost

The cost of subscription is \$168.50 per year.