EML-614

ENVIRONMENTAL MEASUREMENTS LABORATORY
2002 UNIT PERFORMANCE PLAN

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Environmental Measurements Laboratory
U. S. Department of Energy
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*"Approval of this plan constitutes an agreement between the two parties as to performance commitments, it is not an endorsement of projected resource requirements."

DISCLAIMER

ABSTRACT

This EML Unit Performance Plan provides the key goals and performance measures for FY 2002 and continuing to FY 2003. The purpose of the Plan is to inform EML's stakeholders and customers of the Laboratory's products and services, and its accomplishments and future challenges. Also incorporated in the Unit Performance Plan is EML's Communication Plan for FY 2002.

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INTRODUCTION

The Environmental Measurements Laboratory (EML) is an integral component of the Department of Energy's (DOE) program to provide radiation measurement capabilities, data quality assurance (QA), and technical assistance to scientists and managers of environmental assessment and restoration projects. Formerly known as the EML Business Plan, this 2002 EML Unit Performance Plan:

- provides key goals and performance measures for FY 2002 and continuing to FY 2003,

- informs the DOE Chicago Operations Office (CH) of EML's plans and accomplishments so that CH can fulfill its program support responsibilities, provide advice and counsel, and track progress against EML goals,

- identifies opportunities for the DOE Office of Environmental Management (EM) to use EML's capabilities to contribute to EM's environmental cleanup mission, and to ensure that EML is providing quality returns for EM direction dollars. EML continues to face a fast-changing business environment seeded with tremendous opportunities in:

  - technology innovations, especially in remote sensing and on-site analyses;

  - homeland defense;

  - promoting EML services, especially in QA, technical data management, and in expert advice in sampling and analysis;

  - growing requirements for EML's expert technical assistance in Work for Other (WFO) initiatives both inside and outside of DOE;

  - increasing pressure to improve performance, productivity, and efficiency at every level in specific projects and in the management of the whole organization;

  - employee retention, development and recruiting.

EML management decided upon the goals and performance criteria in this report after an intensive analysis. Additional information was gathered from selective stakeholders and customers including EM, Office of Science (SC), Office of Defense Nuclear Nonproliferation (NN), and CH.

EML's challenges for FY 2002 include:

- investing in QA field measurement expertise, especially for environmental decontamination and decommissioning investigations;
- developing additional QA expert advice and consulting assignments within EM and the DOE complex, building on the success and reputation of EML's Quality Assessment Program (QAP);
- continuing the integration of appropriate EML staff into essential technical and advisory functions for EM;
- creating an increasingly supportive EML environment where environmental scientists can thrive.

The resulting business strategy will enable EML to continue to provide DOE and other federal agencies with the in-house capabilities needed to respond quickly to current environmental and related national security issues. EML thanks CH, EM, EML employees, EML customers, and others who have provided guidance, ideas, advice and support to create this plan for EML's near-term future.

OVERVIEW

MISSION

EML's mission is:

"EML is a federal technical resource that addresses environmental radiation and radioactivity issues for environmental quality, science, and national security."

Within this mission, EML:

- Provides DOE and other federal agencies with an unbiased and responsive technical capability to assure quality in sampling, measurements and analyses, and risk assessments of human exposure to radioactivity and other energy-related pollutants.
- Conducts scientific investigations and develops technologies related to environmental restoration, site and facility characterization, and environmental surveillance and monitoring.
- Provides DOE and other federal agencies with an in-house, high quality scientific capability to address important issues related to national security such as nonproliferation.

BACKGROUND

EML is a distinguished government-owned and government-operated (GOGO) federal laboratory with a rich history in environmental applied research. A small group of scientists involved in industrial hygiene activities associated with the Manhattan Project began the Laboratory at the end of World War II. It was established in 1947 as the Medical Division, a small laboratory of the U.S. Atomic Energy Commission (AEC). In 1949, the name of the Laboratory was changed to the Health and Safety Division and in 1953 it became the Health and Safety Laboratory (HASL). When the AEC was abolished in 1975, HASL became part of the Energy Research and Development Administration (ERDA). In 1977, DOE absorbed ERDA and the Laboratory changed its name to the Environmental Measurements Laboratory (EML).

Beginning in 1996, EML was designated as an EM Laboratory and shifted its technical focus towards technical support of EM's Programs. This transition included significant changes in staffing assignments, technical programs, and management at the Laboratory.

The Laboratory was selected by the U. S. Delegation to the Preparatory Commission for the Treaty Organization, Vienna, Austria, as the U.S. radionuclide laboratory to be incorporated into the International Monitoring System (IMS). The Department's National Analytical Management Program (NAMP) signed a Memorandum of Agreement with EML designating EML as a reference laboratory for the DOE Radiological Traceability Program. EML was also selected by the World Meteorological Organization (WMO) as the World Calibration Center for Radioactivity in its Global Atmosphere Watch (GAW) Program. EML's selection for these designations was made based on its long and distinguished 54-year history as an internationally recognized laboratory for environmental radiation measurements and monitoring systems, and because of its experience in international laboratory QA programs in nuclear measurements.

CORE CAPABILITIES

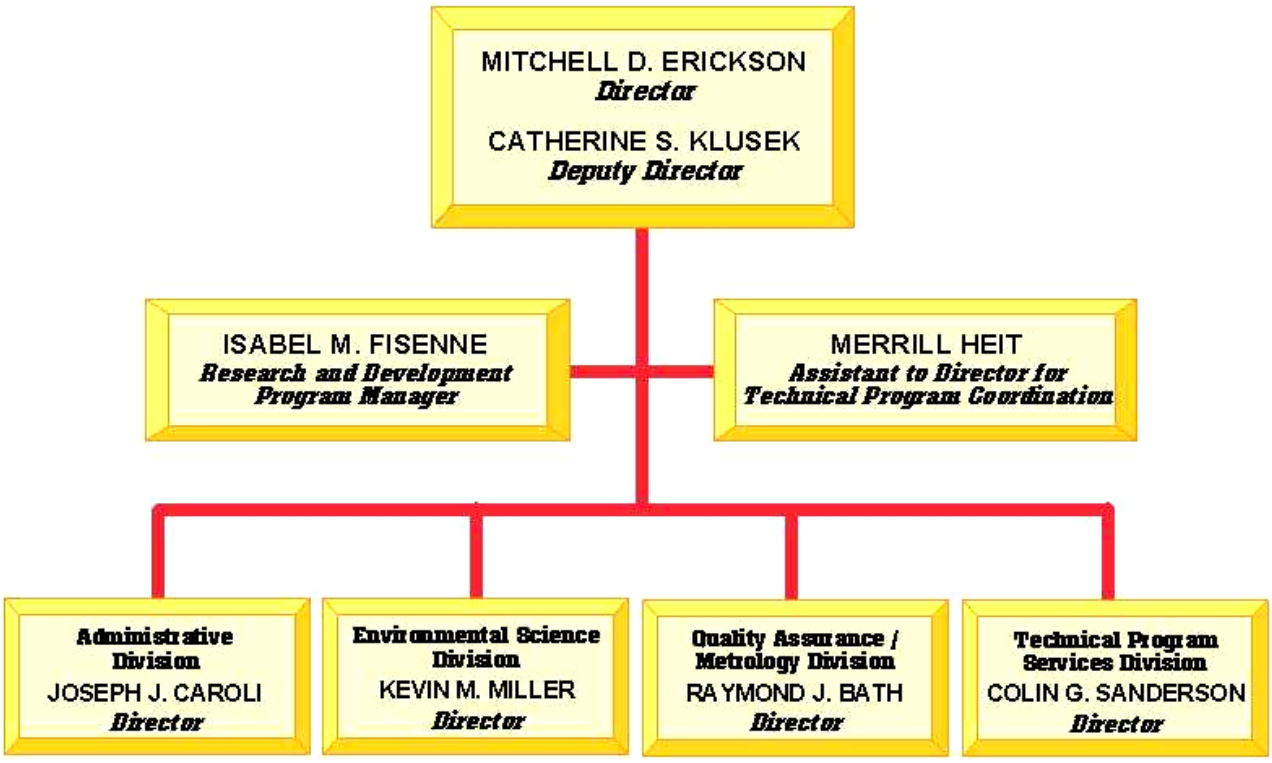
Utilizing its core capabilities EML has made valuable contributions to improving analytical measurements and reducing the risks associated with environmental cleanup and other issues facing the Department. These capabilities include:

- Cleanup Criteria
- Radiation Survey Planning
- Design and Fabrication of Instruments
- Real-Time Measurements and Laboratory Analyses
- Sampling of Environmental Media
- Assessment of Radiation Dose to Humans
- Measurement Quality and Data Quality Assessment
- Database Visualization

STAFF AND ORGANIZATION

For FY 2002, EML has a federal employee ceiling of 60 full-time equivalents (FTEs). These FTEs are assigned to EML through CH. The scientific staff is composed of physicists, chemists, and engineers

EML's organization includes a Director's Office and four Divisions — Quality Assurance/Metrology, Environmental Science, Technical Program Services, and Administration. These Divisions run discrete projects and possess primary customer responsibilities, but much of the project and applied research work takes place through cross-functional teams spanning the divisions. Laboratory scientists, engineers, technicians, and support staff offer a team-oriented approach that brings a unique federal perspective and capability in meeting national needs. The professional staff is diversified with individuals holding degrees, many advanced, in fields such as: Atmospheric Chemistry; Analytical Chemistry; Biology; Computer Science; Electronics Engineering; Energy Science; Environmental Science; Geology; Health Physics; Mathematics; Meteorology; Mechanical Engineering; Physics; Public Administration; Public Health; Radiochemistry; Statistics.



EML also utilizes a full range of administrative support services in carrying out its mission. These include traditional services, such as secretarial, property management, accounting, library, shipping and receiving, and editorial, computer and machine shop services. In addition, operational support such as safety, security, radiation protection, emergency preparedness, nuclear material control, and QA are funded as administrative costs. Providing these operational services has become more complex, demanding, and costly over the last few years.

LOCATION AND FACILITIES

EML resides in a General Services Administration (GSA) building in lower Manhattan, New York. The Laboratory also operates the "EML field performance testing area" at Brookhaven National Laboratory (70 miles to the east in Suffolk County on Long Island) that is used for special investigations. EML also maintains an active Internet presence through its Web Site (www.eml.doe.gov).

The key special facilities at EML include:

- Chemistry Laboratories
- Environmental Chamber
- Neutron and Gamma-ray Calibration Facility
- Pulse Ionization Chambers for Radon Measurements
- TLD Reader Facility
- Electronics Assembly and Test Area
- Machine Shop
- Sample Preparation Facilities

BUDGET

The EML FY 2002 budget is anticipated to be $7.7M of which the majority is funded by EM with supplemental funding from SC and NN, and the remainder by WFO customers.

COMMUNICATIONS

EML is continuing to improve its services through continual communication outreach. EML produces publications for peer review journals, EML reports, Annual Reports, Weekly Highlights, articles for DOE This Month and Initiatives, a Brochure, fact sheets, and other appropriate publications for its customers and potential customers. EML also participates in OST's Communication Working Group monthly calls, workshops, and committees. The EML Communication Plan is attached in Appendix A.

CUSTOMER SATISFACTION

EML has an active program in Customer Service. The EML Writer/Editor is the EML Customer Focus Advocate and participates in the CH Customer Service Initiative. The most important factors that create satisfaction for EML's customers are: 1) responsiveness, 2) reliability, 3) an unbiased federal response in line with DOE policy, and 4) a high technical level of expertise.

The following are statements from Dr. Carolyn L. Huntoon, Acting Assistant Secretary for Environmental Management, from the external Program Review of EML conducted on May 10, 2001 OST, clearly illustrate the positive feedback the Laboratory receives from its prime customer.

> "I congratulate you on the highly successful program review of the Environmental Measurements Laboratory (EML). ….we have a better understanding of your laboratory's unique role as a government-owned, government-operated (GOGO) laboratory and what it can contribute to EM and other DOE program missions. The importance of EML's role in providing third-party scientific advice to the Department, its contractors, and management of radiological standards and quality assurance programs clearly was demonstrated."

PRODUCT LINES

To fulfill its mission and accomplish its goals, EML has integrated its projects into three product lines:

- Radiation and radioactivity (R&R) instrument development and deployment;
- Specialized (R&R) measurements and data analysis; and
- Management and technical assistance.

R&R INSTRUMENT DEVELOPMENT AND DEPLOYMENT

EML has a long history of developing low-level radiation detection and measurement instruments. While many of these instruments have lead to commercial products, many are developed for small niche, customer-specific requests. EML's current efforts in technology development are applied to EM characterization and long-term stewardship monitoring, as well as national security activities.

SPECIALIZED R&R MEASUREMENTS AND ANALYSIS

Analytical QA

EML develops and implements QA methodology and programs to assess, track, evaluate, and improve the nationwide performance of the Department's contractors for field survey measurements and radioanalytical services. EML provides performance testing intercomparison programs, customer-specific QA samples and analysis, and simultaneous and co-located measurements.

Field Radiation Surveys and Measurements

EML supports EM cleanup and closure activities and long-term stewardship at DOE sites by developing, demonstrating, and deploying advanced radiological measurement and survey methods and instruments; by assisting in the collection, interpretation, and modeling of radioactive contaminant data, especially in low-level (at or near background) situations; and by insuring the overall quality, cost effectiveness, and industry acceptance of field radiation measurement technology.

Nonproliferation

As a federal facility, EML supports DOE's National Security mission through its detection and deterrence activities for the Nonproliferation Treaty. EML has been designated as the U.S. radionuclide laboratory in support of the IMS for the Treaty.

Aerosol Sampling

EML maintains a worldwide network of Surface Air Sampling Program (SASP) and remote atmospheric measurement system (RAMS) sites. After collection, the filters are analyzed for radioactive nuclides. The results of the analysis are received at EML within 48 hours, allowing for the evaluation of the concentrations of ^{7}Be, a naturally occurring, short-lived radionuclide, used as a tracer for vertical mixing processes in the atmosphere. In collaboration with the WMO and various institutes in China, EML will be collecting surface air samples and studying the transport process in the atmosphere over China.

MANAGEMENT AND TECHNICAL ASSISTANCE

Consultation and Program Management

EML staff provides support to EM and Office of Science (SC) Headquarters in fulfilling

important programmatic functions and responsibilities. As federal technical experts, the EML staff not only fulfills administrative roles, but also provides essential technical direction for several programs. EML staff are also members of several advisory committees and interagency working groups that help the Department maintain its high quality research and relevance in the areas of environmental radiation and radioactivity measurement and detection.

Protecting Human Subjects Database Management (HSRD)

EML maintains and provides Internet access to the DOE HSRD for the Office of Science (SC). The HSRD contains information relating to research projects involving human subjects that are currently funded by DOE, or are performed at DOE facilities with support from other sponsors, or are performed by DOE personnel or DOE contractor personnel.

Emergency Response

EML can quickly respond to the needs of the Department and other federal agencies during emergencies and national security alarms, providing state-of-the-art monitoring and other methodologies for the detection of radiation and radioactivity.

CUSTOMERS

EML serves a broad range of federal customers, primarily in DOE that require applied research and operational capability in environmental R&R measurements, QA, and technical data management. EML's primary near-term strategy for fulfilling its mission and for increasing customer satisfaction and innovation will be to continue to meet the needs of its current customers. EML's current (FY 2002) federal customers include:

DEPARTMENTAL OFFICES

- Office of Environmental Management (EM)
- Office of Science (SC)
- Office of Defense Nuclear Nonproliferation (NN)

Federal Agencies

- DoD Air Force (AF)
- DoD Defense Threat Reduction Agency (DTRA)

- DoD Army Corps of Engineers (ACE)
- Environmental Protection Agency (EPA)
- Nuclear Regulatory Commission (NRC)

SUPPORT TO EM

As EML's primary customer, the Laboratory supports the EM Office of Science and Technology (OST) in fulfilling important programmatic functions and responsibilities. As federal technical experts, the EML staff not only fulfills administrative roles, but also provide essential technical direction for several OST programs, as follows:

- Characterization, Sensor and Monitoring Technology Cross Cut Program (CMST-CP)
- Joint Coordinating Committee on Environmental Management (JCCEM)
- Office of Long-Term Stewardship (LTS)
- Decontamination and Decommissioning Focus Area (DDFA)
- TRU and Mixed Waste Focus Area (TMFA)
- Technical Assistance Program, Subsurface Contamination Focus Area (SCFA)

EML also supports the Office of Safety, Health and Security (EM-5), Quality Systems Program through:

- National Analytical Management Program (NAMP)
- Analytical Services Program
- Risk Program
- QA Program

EML participates on the Advisory Review Team of the Los Alamos Pueblo Program (LAPP) sponsored by the Office of Intergovernmental and Public Accountability (EM-11) in partnership with Office of Facilities Management and ES&H Support (DP-17).

EML provides technical assistance to EM Field Offices:

- Brookhaven Area Office (BAO)
- Argonne Area Office (AAO)
- Fernald Environmental Management Program (FEMP)
- Chicago Operations Office, Center for Risk Excellence (CRE)

PRODUCTS AND SERVICES FOR DOE AND WFO CUSTOMERS

OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)

EML's main mission is to support EM's site closure and cleanup completions through: (1) technical assistance to the DOE field offices, (2) activities in the development and deployment of radiological field characterization and monitoring technologies, and (3) performance testing programs which provide external oversight of the quality of data used in DOE cleanup activities.

The functions and projects have been organized in the following areas: Instrument and Methods Development, Technical Support to Field Sites, Data Quality, and Consultation and Program Management. Each of these areas is briefly described below.

Instrument and Methods Development

EML has a long history of developing low-level radiation detection and measurement instruments. While many of these instruments have lead to commercial products many more have been developed as one-of-a-kind instruments to provide data to support a specific EM needs within program areas such as decontamination and decommissioning and long-term stewardship. Examples of EML instrument developments are:

- Portable Aerosol Sampling System (PASS) for sampling for uranium and thorium isotopic analyses.
- Alpha-AUTORAMP completely automatic, field deployable system that performs alpha–particle sampling and spectrometry analyses of filter cartridges.
- Ideal Poisson Analyzer enhances the accuracy of radiological survey instruments by making their interpretation less subjective.
- Themoluminescent dosimetry (TLD) instrument upgrades for determining the integrated dose of ionizing radiation.
- *In Situ* Gamma-Ray Spectrometry advancements to produce more accurate and reliable *in situ* measurements during the assay of surface soil for gamma-emitting radionuclides.
- Deconvolution methods development for radiation measurements at EM sites, such as FEMP.

Technical Support to Field Sites

Cleanup efforts across the DOE complex require a wide range of low-level radiation and radioactivity assessments that are used in contaminant characterization studies, remediation control guidance, final status surveys, and long-term stewardship. In some situations, specialized environmental or worker protection compliance monitoring is required.

As a government-owned government-operated laboratory with over a 50-year history of studying environmental radiation and radioactivity, EML helps to meet the needs of EM by serving as an interface between DOE and contractor staff on technical issues that impact on remediation goals and strategies. This includes providing consultation on radiation survey planning, data quality objectives, background levels of radionuclides, radiation dose models, environmental transport, measurement techniques, and data assessment. EML itself also performs environmental measurements when independent expert assessments are needed as in the case of demonstration surveys, comparability studies, continuous monitoring for ES&H impact, and retrospective dosimetry studies.

EML's participation in field-site planning and survey activities is a cost-effective means by which DOE federal and contractor staff can receive unbiased expert advice and information on special radiation and radioactivity assessment issues that are integral to site remediation and which might otherwise adversely impact closure schedules. Among the EM sites that benefit from EML's technical support are Fernald Environmental Management Project (FEMP), Brookhaven National Laboratory (BNL), Mound Environmental Management Program (MEMP), and RMI Extrusion Plant Ashtabula, OH.

Data Quality

- **Quality Assessment Program (QAP)**. DOE's Quality Assessment Program (QAP) is a performance evaluation (PE) program for environmental radiological measurements. The program is administered by EML for EM-5 under a Memorandum of Agreement (MOA) with EM 5's NAMP. EML has administered QAP since 1976 for participating laboratories that provide radiological analyses for EM, Environment, Safety and Health (EH), and SC. In the most recent QAP distribution (QAP54, March 2001), 149 laboratories submitted over 3000 analytical results for evaluation.

  EML was requested by DOE to establish an external QA program to substantiate the quality of the analytical techniques used by their contractors. The DOE contractors are required under DOE O5400.1 and O414.1A to select laboratories that participate in an external QA performance evaluation program for radionuclide laboratory measurements. QAP provides the DOE facilities this external, independent evaluation of environmental radiological analyses by providing the National Institute of Standards and Technology (NIST) traceable PE materials.

The QAP PE materials consist of blind test samples (water, soil, air filters, and vegetation) that are sent to participating laboratories twice a year and analyzed by all the laboratories at the same time and within the same time constraints. Participation in a DOE-wide program provides for a uniform standard of measurement for DOE field management.

- **Quality Assessment (QA).** Because of the significant cost savings associated with field measurement techniques, they are gaining support in environmental restoration projects within DOE. However, facilities that want to use them must show that the data satisfies regulatory requirements. Intercomparisons have long been a key element in QA programs for field measurement techniques. They are an effective tool for evaluating sources of bias and as such provide a mechanism for standardization and establishing traceability. EML has a long history of evaluating data quality for a variety of environmental measurements through intercomparisons and QA programs. To address the quality issues for field measurements for environmental restoration and regulatory compliance, EML organizes, conducts and participtes in intercomparison exercises. Also, EML assists DOE sites with field measurement QA on an as-requested basis. Other tasks include a program that evaluates the performance of DOE laboratories and contractors for gamma spectrometry analyses, and a program that establishes traceability for radioanalytical activities related to environmental programs conducted throughout the DOE complex.

Program Management and Consultation

- EML staff, as federal technical experts, continues to provide program management services by supporting EM HQ in fulfilling administrative roles and by providing technical direction **Laboratory Management/LTS HQs Detail**. EM-50 is now the Cognizant Secretarial Office (CSO) for all EM Laboratories, including EML, and has established a Laboratory Management group to supervise these organizations. In order to ensure that the EML/OST partnership is as productive as possible, an EML scientist continues to serve on detail at EM Headquarters in Washington, D.C. In FY 2002, it is anticipated that the major focus of the detail will be on assisting the Long-Term Stewardship (LTS) Office.

- **Cleanup Criteria /Decision Document (C2/D2).** Since 1999, EML has been responsible for the management and improvement of the C2D2 Database. EM established this database in 1992 to record site-specific environmental contaminant concentration levels that DOE has agreed to cleanup to. Responsibility for the C2D2 was transferred to DOE's Center for Risk Excellence (CRE), and the CRE asked EML to lead this project.

- **Support for EM-5.** EML provides technical support to the High Level Waste (HLW) Program for QA audits and for other activities requested by EM-5. Audits are conducted to assess the adequacy and effectiveness of QA program implementation as applied to waste

- acceptance activities associated with HLW vitrification production. These audits are also conducted to meet the provisions of the Office of Civilian Radioactive Waste Management QA Requirements and Description (QARD; DOE/RW-0333P). EML also provides technical personnel to the audit teams for the purpose of assessing the facility's QA associated with sampling, analytical and radioanalytical procedures, analytical data, instrument calibrations, and traceability and laboratory personnel training protocols. The results of their assessments are detailed in the QA Program Audit Reports issued for each audited facility.

- **Multi-Agency Radiological Laboratory Analytical Protocols (MARLAP) Work Group.** MARLAP provides guidance for the planning, implementation, and assessment phases of those projects that require the laboratory analysis of radionuclides. EML's activities on the MARLAP Working Groups support EM-5/NAMP's Interagency Cooperation Program Area activities in response to recent reports from the Office of the Inspector General on the lack of data quality and project planning at Federal Superfund Sites. By maintaining state-of-the-art capability and a high level of professional recognition, EML is able to authoritatively address environmental radiochemistry issues that impact on DOE and other federal agencies.

- **Los Alamos Pueblo Project (LAPP) Technical Advisory Review Team.** DOE signed formal Accords with the Cochiti, Jemez, San Ildefonso, and Santa Clara Pueblos in December 1992, establishing a formal framework for a government-to-government relationship. As part of the Accords and follow-on agreements, the Pueblos requested funding to develop environmental monitoring programs to independently assess the impact of Los Alamos National Laboratory (LANL) operations and activities on their resources. DOE, through EM and DP, began funding the four Accord Pueblos' environmental programs in FY 1996 through the Los Alamos Pueblo Project (LAPP), a cooperative agreement. EML continues to participate as a member of the Technical Advisory Review Team. In addition, EML continues to support the LAPP as required through availability to the Pueblos for advice, consultation, document reviews, and training.

- **United States Transuranium and Uranium Registries (USTUR) Advisory Committee.** The USTUR includes the National Human Radiobiology Tissue Repository and the National Radiobiology Archives. These registries are a unique human tissue research facility for studying the deposition, biokinetics and dosimetry of the actinide elements in humans. An advisory Committee to the USTUR provides an independent review of the work in progress and provides guidance on setting priorities. An EML scientist has served for four years on the Committee in the dual role of radiochemistry expert and DOE representative to the Committee.

SERVICE TO OTHER DOE OFFICES

As a federal resource laboratory, EML provides DOE offices with a readily available and objective in-house capability in support of their special and unique requirements. EML conducts

authoritative and unbiased reviews and evaluations of proposals and provides expert consultation for the Office of Science (SC), and the Office of Nonproliferation and National Security (NN).

Office of Science (SC)

EML provides support to SC-HQ in three areas: (1) day-to-day coordination of DOE activities for the Strategic Environmental Research Development Program (SERDP); (2) DOE representation to Interagency Arctic Research Policy Commission (IARPC); and (3) maintenance and operation of the Human Subjects Research Database (HSRD). All three functions are performed through the auspices of the SC Office of Biological and Environmental Research (OBER, SC-70). SERDP and IARPC activities require bi-weekly on-site EML presence at HQ-Germantown in OBER. Brief descriptions of these activities are given below.

- **SERDP.** SERDP is a congressionally mandated tri-agency (DoD, DOE, EPA) R&D Program that addresses the defense-related environmental priorities of DoD and DOE. The Program concentrates on research and development within four thrust areas: "cleanup," "compliance," "conservation," and "pollution prevention" technologies. Since 1996, EML has performed the administrative and technical tasks associated with managing this Program for SC-70. This function requires continuing communication and interaction with DOE-HQ Secretarial Offices (SC, EM, DP/National Nuclear Security Agency, Controllers Office), DOE Field Operations Offices, National Laboratories, and the DoD and EPA.

- **IARPC.** The Arctic Research and Policy Act of 1984 provides for a comprehensive national policy dealing with national research needs and objectives in the Arctic and establishes an Interagency Arctic Research Policy Committee to help implement the Act. Thirteen agencies participate in the resulting IARPC (NSF; DOI, DoD, EPA, DOT, HHS, NASA, DOC-NOAA, DOA, DOI, OSTP, State, and the Smithsonian). EML has represented DOE through SC-70 on all matters related to the IAPRC and many related to the Arctic since 1994**.**

- **HSRD.** The Federal Policy on Protection of Human Subjects (10 CFR Part 745) provides uniform guidelines for all facilities involved in federally sponsored research. Responsibility for the protection of human subjects at the DOE resides in the Protecting Human Subjects Program managed by the SC-OBER Life Sciences Division (SC-72). The HSRD, an Internet accessible database, contains information relating to all research projects involving human subjects (projects reviewed by an IRB and not given "Exemption" status) that are currently funded by DOE, or are performed at DOE facilities with support from other sponsors, or performed by DOE personnel or DOE contractor personnel. This database consists of a searchable interface, detailed descriptions of each research project, and a section that summarizes the information for quick referencing. The HSRD is updated annually by EML.

Office of Nonproliferation and National Security (NN)

EML conducts projects that support the DOE Office of Nonproliferation Research and Engineering (NN-20), in the Office of Defense Nuclear Nonproliferation (NN-1). The primary mission of NN-20 is to identify existing or potential nuclear proliferation threats anywhere in the world. The research and development approach to accomplishing this mission is to identify potential signatures of proliferation activities through the development of advanced analytical technologies coupled with current techniques in sample collection, analysis, and data reduction. EML supports this program area through:

- **EML Sample Archive and Database** - Environmental samples have been collected since the 1950s in EML's global programs. A database identifying archived samples and measurements from these programs is being prepared for Internet access. Many of these historic samples, collected during the period of atmospheric nuclear weapons testing, have unique isotopic compositions and therefore can be used to test and evaluate instruments developed by the NN-20 community and others. In addition, the samples can be used for geolocation in forensic nuclear analysis, for identification of environmental signatures of nuclear activities, and to establish current baseline values for selected environmental signatures.

SERVICES FOR WORK FOR OTHER CUSTOMERS (WFO)

EML's longstanding reputation for excellence in environmental measurements has led to its being called upon for assistance and consultation by numerous organizations in the United States and around the world. The Laboratory fulfills special needs within the scientific community outside of DOE that relate to the assessment of radiation and radioactivity in the environment. Projects of this nature are a natural extension of the staff's collective expertise and are in keeping with a larger role that a specialized laboratory such as EML plays within the DOE family. EML's WFO customers gain from the Laboratory's unique strengths. Examples of WFO activities include:

Air Force Technical Applications Center

EML has maintained a worldwide network of surface air sampling stations since 1963. Airborne particles are collected on highly efficient polypropylene filters from about 8,000 cubic meters of air each week at these stations. After collection, the filters are returned to EML and are analyzed for radioactive nuclides.

U. S. Nuclear Regulatory Commission (NRC)

EML has been under contract to the NRC since 1993 to provide information and to develop survey methodology that would help form the technical basis to support their rulemaking on decommissioning of licensed facilities and to support their initiatives addressing clearance of materials. The objective of EML's current work is to provide supporting research and development to the Office of Nuclear Regulatory Research in developing survey and analytical techniques appropriate for determining by measurement, residual radioactivity levels that are at or near background radiation levels in subsurface regions of survey units and to integrate this technology with surface measurements. This work is necessary for the NRC staff to continue establishing a technical basis for demonstrating and validating compliance with a distinguishable from background criterion for clearance of materials.

World Meteorology Organization (WMO) Global Atmosphere Watch (GAW)

EML's Surface Air Sampling Program (SASP), part of EML's Global Sampling Network, has been in continuous operation since 1963, supplying the scientific community with basic data used to assess nuclear fallout, accidental releases of radioactivity, and levels of naturally occurring radionuclides, such as ^{7}Be and ^{210}Pb, in the surface air. At each site, particulates from large volumes of air are collected on filters and then returned to EML for gamma-ray analysis. Collaborating with Chinese scientists, EML will set up the first ever radionuclide surface air sampling sites in China. The objectives of this project are to continue collaboration with the WMO, pursue the role of EML as the World Calibration Center for Radioactivity (WCC-R) in the GAW, and study the global transport of radionuclides.

Neutron Spectrometry Scientific Community

EML is internationally recognized for its research in neutron spectrometry (measuring the energy distribution of neutron radiation). Neutron spectrometry is essential for understanding the penetration and effects of neutron radiation, including risks to human health, effects on microelectronics, and production of radionuclides by neutron activation. The techniques used to calculate the responses of our neutron spectrometer detectors can also be applied to a wide variety of radiation transport problems, such as calculating other detector efficiencies, non-destructive analysis of spent fuel and TRU waste containers, modeling for clearance surveys, shielding analyses, etc. EML has developed a high-sensitivity high-energy multisphere (also known as Bonner sphere) neutron spectrometer, and state-of-the-art analysis methods. One such method, the spectral deconvolution code, MAXED, is now being adopted by neutron spectrometrists around the world. The instruments and methods we have developed can be applied to improve radiation dosimetry at accelerators, plutonium-handling facilities, and wherever there is neutron radiation with an unusual or unknown energy spectrum. Past and current interest in EML's neutron spectrometry capabilities have been expressed by LANL, the Princeton Plasma Physics Laboratory, NASA, BNL, and the U. S. Naval Academy.

PERFORMANCE EVALUATION

In the successful conduct of its business as a scientific and technical resource to DOE for improving environmental measurements, while providing a technical basis for regulations and standards, reducing the risks and costs of environmental activities, and, thus, improving the quality of life, EML will:

- expand its recognition as a unique, internationally renowned environmental research facility, integrating the physical and chemical sciences, that conducts multidisciplinary investigations at local to global scales of current and anticipated concerns to the DOE and other federal agencies;

- grow in its function as an authoritative QA laboratory for different DOE Secretarial Offices in the management and execution of environmental measurements, sampling and analyses;

- be identified as an innovative developer of science and technology for measurements of environmental contaminants and physical phenomena, and be an active promoter for the adoption of this technology by government and industry;

- enhance its ability to conduct multidisciplinary scientific studies to understand better, at the local and global level, the effects of contaminants on the environment and human health;

- attain wide recognition as an in-house federal center of scientific excellence providing objective advice on, and rapid response capability for, critical environmental and related national security issues; and

- institute excellence in the quality of all operations with special emphasis upon environment, safety and health issues, establishing conditions that exceed basic compliance with all federal, state and local regulations.

PRIMARY EML GOALS (FY 2002)

Based upon the major activities of the Laboratory, its customers, and current situation analyses, four primary goal areas have been identified for the horizon of this 2002 Unit Performance Plan. Summarized in Appendix B are the metrics and accomplishments for 2001, and the metrics and four goal areas for 2002. These four goal areas include:

EML Management Goal

EML will be structured and its technical programs oriented to take advantage of opportunities and contribute to EM and CH strategic plans, their realignment goals, and the National Performance Review.

EML Technical Project Execution Goal - QA, Environmental Measurements and Innovative Research and Technology

EML will be recognized as a key federal resource in addressing critical issues in environmental measurements for DOE and other national and international organizations. This will include strong technical and QA roles in field measurements for environmental contamination investigations, long-term stewardship, decontamination and decommissioning programs, emergency response, and matters relating to nuclear treaty monitoring. Innovative research and technology development will be required to maintain state state-of-the-art skills.

EML Supportive and Safe Environment Goal

EML will continue to maintain a safe employment environment through application of the Integrated Safety Management (ISM) principles. The Laboratory will also establish a supportive and rewarding work atmosphere that will attract, retain and motivate the staff to fulfill the scientific, technical, and administrative goals and responsibilities of the Laboratory.

EML Administrative Goal

EML will improve administrative efficiency to support the technical and scientific staff in fulfilling the Laboratory's mission in a timely and productive manner.

EML PROGRAMMATIC GOAL

The recommendations from the External Program Review of EML conducted by EM on May 10, 2001 have been added to Appendix B as additional performance goals for FY 2002.

CH CORPORATE GOALS

Consistent with the planning efforts of CH, EML has aligned its goals with the goals, objectives and/or recommendations of the CH FY 2002 Strategic Priorities and the CH Strategic Goals and Objectives, and the corresponding priorities or objectives are shown in Appendix B.

CH FY 2002 Strategic Priorities

CHP-1 Institutionalize Strategic Management

CHP-2 Strategically Manage Human Capital
CHP-3 Promote Operations Office Roles and Responsibilities
CHP-4 Complete Projects Successfully
CHP-5 Enhance Integrated Management of Management and Operating Contracts
CHP-6 Integrate Government-Owned/Government-Operated (GOGO) Laboratories into the CH Portfolio
CHP-7 Explore Business Initiatives

CH Strategic Plan Goals and Objectives

Science & Technology Delivery Goal (SC): "We are recognized by the Office of Science as a full partner, who is important to the successful execution of our laboratories' missions."

Objectives:
SC-1: Enhance and further develop performance-based management at CH laboratories.
SC-2: Develop and implement an integrated management approach to facilities stewardship to enable a full partnership with SC.

Corporate Management Goal (CM): "Demonstrate excellence through the application of performance-based management principles to ensure that our results-oriented, cost-effective approaches support our customers and stakeholders."

Objectives:
CM-1: Develop and implement a strategic management system (SMS) enabling us to make resource and other decisions based on this strategic plan and, through self assessment processes, create accountability through all levels of CH.
CM-2: Develop and implement an Information Architecture Plan for CH.
CM-3: Develop and implement a comprehensive organizational skills/realignment/succession planning assessment that will enable CH to implement an optimum organizational structure.
CM-4: Analyze CH's Employee Performance Management/Recognition & Rewards Systems.

Stakeholder Goal (CS): "We will be recognized by our stakeholders as an open, responsive, and valuable organization that is worthy of trust and which contributes to society."

Objectives:
CS-1: Develop processes that stress openness, inclusiveness, and collaboration with our stakeholders.
CS-2: Build a positive DOE image as either a national science and technology asset as well as a local economic and community service asset.
CS-3: Use the Internet as a significant forum for communications with our stakeholders.

Strategic Partnership Goal (SP): "Demonstrate successful strategic partnerships to leverage science and technology and to improve our delivery of science and operational effectiveness in support of the Department."

Objectives*:*

SP-1: Pursue and implement new programs and initiatives that enhance our business base and competencies and enable CH to address nationally significant challenges faced by the Department.

SP-2: Support interagency programs similar to the Office of Civilian and Radioactive Waste Management (OCRWM) International Program and the Ames Environmental Restoration Project, which link specialized capabilities of other federal agencies to enhance overall DOE performance.

REWARDS AND RECOGNITION PLAN

Unit Performance-Related Awards - The EML Director will determine which employees will receive performance-related awards at EML. If such an award is distributed, EML will use CH guidelines to determine the amount/value of the award.

Incentive Awards - If funding is available, incentive awards for special acts/ achievements will be distributed throughout FY 2002 to provide timely recognition of individual or team accomplishments that have demonstrated significant contributions to EML's goals and objectives. These awards may be monetary, time off, or quality step increases, and include: "EML Plus One," "EML Business Builder," "Teamwork," "Manager," and "Workplace Achievement."

Employees and teams may be nominated by an employee through the CH Rewards and Recognition System. Supervisors must concur and the Laboratory Director must approve these awards.

APPENDIX A

EML COMMUNICATION PLAN FY 2002

EML Communication Plan

INTRODUCTION

The purpose of the EML Communication Plan is to ensure that the management and staff of EML efficiently and effectively communicate to interested and involved stakeholders and customers the programs and capabilities of EML. The Plan describes the standards ways, but not necessarily all possible ways, to distribute program and product information.

EML management and staff are encouraged to engage in communication activities beyond the scope of this plan. Face-to-face communications at conferences and workshops, publications in technical journals, and formal and poster presentations at conferences are important ways that EML delivers its message to its targeted audiences. The products mentioned in this plan will be more effective when used as a supplement to these personal and professional interactions.

The Communication Plan identifies EML's communication tools and indicates the level of support and resources required for each. It also provides specific production guidance for these tools. The Plan will be revised annually to address the resource needs for the fiscal year.

EML is a federal technical resource which addresses environmental radiation and radioactivity issues for environmental quality, science and national security. EML understands that there are audiences vital to the success of its programs.

For a complete description of EML's projects and customers and stakeholders, refer to the EML FY 2002 Unit Performance Plan.

KEY COMMUNICATION TOOLS

Contained in the EML Communication Plan are the communication products produced by EML in conjunction with the Office of Science and Technology (OST, EM-50). These products are compiled and organized following the requirements and guidelines provided by OST, and are reviewed and disseminated by OST.

Additional communication tools created by EML are also presented that can be used to provide information about the Laboratory and disseminate information on new product development.

The Attachments contain detailed guidelines for specific EML communication tools.

To the extent possible, all EML communication tools are accessible electronically on the EML web site directly in pdf or html format or through a hyperlink to the OST web site

(http://www.em.doe.gov/ost/). Products that serve as reference materials are made available on CDs or Business Card CDs.

OST COMMUNICATION PRODUCTS

All products produced in response to OST requests are guided by the current fiscal year Communication Plan.[1] Additional product-specific guidance is included in the "Communication Notebook" (http://ost.em.doe.gov) and through the monthly Communication Working Group conference calls. The schedule for all planned communication products is included in the Notebook. OST reviews, prints and distributes these reports for EML. The products are produced by an EML team designated by the Laboratory Director or by the EML Writer/Editor.

EML will continue its close coordination with Diana Krop, Headquarters Communication Program Manager. EML's Writer/Editor is a member of the OST Communication Working Group and is responsible for coordination with Headquarters.

ANNUAL REPORT

The Annual Report gives an overview summary of the fiscal year accomplishments. An EML Team, with representatives from each Division, write, design and develop this report.

INITIATIVES

The OST newsletter *Initiatives* provides information about innovative environmental technologies and cleanup approaches. EML 's Writer/Editor periodically works with the *Initiatives* staff to develop an article on EML-developed technologies.

[1] Office of Science and Technology, "FY 2001 Headquarters Communication Plan," October 2000.

EML COMMUNICATION PRODUCTS

Communication tools produced by EML staff and teams and the roles and responsibilities are discussed and summarized below.

TECHNICAL PUBLICATIONS

The EML scientific staff are encouraged to publish when appropriate, management expectations are given in Individual Development Plans (IDP). Attachment 1 provides the EML Publication Guidance. The guidance applies to journals, books, proceedings, and EML reports. The guidance addresses the publication process, the peer review process and the roles and responsibilities of the EML staff, management, editorial and graphic services. Production guidance for EML reports is included as Attachment 2.

NEWS AND PUBLIC INFORMATION ITEMS

Newsworthy information about EML is submitted toDOE newsletters (e.g., DOE This Month, OST Initiatives) and industry and technical society publications to highlight important accomplishments by the EML staff. Newsworthy information is also regularly posted on EML's web site under "What's New." EML's Writer/Editor submits success stories to the Chicago Operations Office (CH) to highlight outstanding accomplishments by an EML team. These stories are posted on the CH Web Site.

WEB SITE

EML maintains a comprehensive, state-of-the art Web Site to communicate to DOE, other government agencies and the private sector the Laboratory's mission, stakeholders, history, core capabilities, and programs. The Web site is maintained through the EML Web Team and Web Master. The Web Team has developed a process for quarterly review of posted materials by key Laboratory staff to ensure that information is current.

BROCHURE

The most recent version of the EML Brochure was produced in 1998 by a team initiated by the Laboratory Director. The brochure is designed with a short overview in permanent text and end pockets for inserting current Programmatic Summaries and Fact Sheets.

PROGRAMMATIC SUMMARIES

Program Summaries provide an overview of funded activities by DOE for the current Fiscal Year. Information about Work for Others is also included in an appropriate summary. Current summaries include:

- Office of Environmental Management
- Service to Other DOE Office
- Work for Others

The Summaries are developed as single sheets that provide: (1) descriptions, (2) activities and accomplishments, and (3) points of contact. The Summaries are reviewed annually by the Staff Assistant and updated as needed. Copies are also available on EML's Web Site.

FACT SHEETS

The Fact Sheets are designed to provide information for several audiences: technology users in EM, other government agencies and private industry; technology providers in industry, universities and other government R&D programs; and technology participants such as regulators, community stakeholders, and standards experts.

The Fact Sheet is a single page overview presentation with photographs or design illustrations of a technology developed or being designed at EML. Fact Sheets are also used to provide an overview of a projects and highlight some key achievements. The Fact Sheets are reviewed annually by the Staff Assistant and updated as needed. New fact sheets are suggested by line management at Project Reviews and Scientific Briefings.

Each sheet provides:

- a short description
- applications for which the technology or project is targeted
- status
- point of contact

DISPLAYS AND EXHIBITS

Exhibits and displays, both externally and internally, are used by EML as strategic communication tools for: affecting perceptions, enhancing awareness, advertising capabilities. EML also uses the exhibit to identify audiences' capabilities and needs, identifying interested audiences for future targeting, and for obtaining feedback on message content. The displays and

exhibit are the responsibility of the Marketing Team, which is composed of representatives from the Divisions. Appendix C contains the Marketing Team Charter that defines the team's function and the goals for EML exhibit and displays.

Business Card CDs are used by the Marketing Team to easily and efficient present large volumes of information about EML (50 megabytes). Business Card CDs are distributed at Trade Shows at the EML exhibit booth, and to those who visit the Laboratory.

Wall displays at EML are used during visitor tours to provide visual materials related to EML projects and technologies. The Marketing Team updates and provides new displays as needed.

The EML Exhibit is a large (8 x 10 foot) trade show booth. The content of the panels was developed in 2001 by the Marketing Team to focus on EML product lines and core competencies. The Exhibit is sent to selected conferences and is occasionally co-located with the OST or EMSP exhibit.

The Marketing Team annually recommends exhibit venues that strongly target the Laboratory's core capabilities and sponsors, and venues for the possibility to expand our sponsor base. The Team recommendations will reflect events where knowledgeable EML personnel will staff the booth. That is, augment the Writer/Editor with senior level management or senior technical personnel. These individuals can answer scientific questions, provide program and/or technical information, and create a more lasting impression.

WEEKLY HIGHLIGHTS

Weekly highlights are provided by the Staff Assistant, with input from all staff, to OST and CH. The Highlights are also sent to EML's customers and stakeholders. The Highlights cover project accomplishments, presentations at conferences, travel, and visitors.

ROLES AND RESPONSIBILITIES

The roles and responsibilities of the EML staff in creating the Communication Tools highlighted above are summarized in Table 1 below.

TABLE 1

SUMMARY OF EML COMMUNICATIONS PRODUCTS
AND RESPONSIBILITIES

Tool	Responsibility	Revision Schedule
Technical Publications	Writer/Editor	NA
News Items	Writer/Editor	NA
CH Success Stories	Writer/Editor	NA
Web Site	Web Team	Quarterly
Brochure	Brochure Team	As needed
Program Summaries	Staff Assistant	Yearly
Fact Sheets	Staff Assistant	Yearly
Vendor Exhibit	Marketing Team	As needed
Wall Displays	Marketing Team	As needed
Weekly Highlights	Staff Assistant	Weekly

ACCOMPLISHMENTS (FY 2001)

PUBLICATIONS OFFICE

- Twenty technical publications
- Twenty five presentations
- Five successful proposals
- Three Year Publications Book (1992-1994) compiled and published
- Draft update of the Publications Guidance completed
- Procedures Manual (HASL-300)
- User friendly Internet format completed and included in Business card CDs
- Over 70 requests worldwide received

- EPA approved 6 EML procedures
- Two new procedures published
- Ten news items for EML's Web Site
- One article for Initiatives
- Presentations tracking program converted from VAX to Internet application

MARKETING TEAM

- A charter statement was developed for the team.
- EML exhibit was completely revised and revitalized.
- EML business card CDs were created, and over 200 were distributed at meetings. OST has been involved in exhibiting the CDs at their booth when EML is not present at a meeting, assuring an EML presence.
- EML exhibited OST materials at the 2001 International Containment & Remediation Technology Conference as requested by Diana Krop, assuring an OST presence at the meeting.
- A display of journal covers featuring EML research was created for the Laboratory Director's Office.
- Wall displays were modernized and new displays were created to increase communications to visitors.

Exhibits

- Waste Management 2001, Tucson, Arizona, February 25 – March 1.
- 2001 International Containment & Remediation Technology Conference, Orlando, Florida, June 10-13
- Chicago Operations Office, Argonne, Illinois, August 6 – 7.

PLANS FOR FY 2002

PUBLICATIONS OFFICE

- Continue to support scientists in their publication activities
- Advertise capabilities outside of regular publication activities to include proposals
- Convert Publications Program to an Internet application
- Compile and publish Three Year Publications Book (1995-1997)
- Complete update of Publications Guidance
- Continue to publish new items for EML's Web site and for EM and DOE newsletters

MARKETING TEAM

- Design a poster version of EML's booth for Chicago
- Continue to upgrade and design new wall displays

Exhibits

Waste Management, Tucson, Arizona, February 24-28, 2002

Spectrum 2002, Reno, Nevada, August 4-8, 2002

ASSESSMENT OF EFFECTIVENESS

EML communication products are evaluated using both direct and indirect indicators of their effectiveness. These indicators provide a mixture of both quantitative and qualitative data. Each of the evaluation mechanisms is described below.

INTERNAL FEEDBACK

The Writer/Editor provides feedback to the Laboratory Director obtained from visitors to the vendor exhibit. The Writer/Editor also provides summaries of the OST Communication Working Group teleconferences and workshops.

UNSOLICITED FEEDBACK

Throughout the fiscal year, EML receives feedback on communication products through impromptu meetings, casual e-mail exchanges, and other informal avenues. Although unplanned, unsolicited feedback also provides qualitative data that helps shape the content, design, development process, and other aspects of communication products.

TRAFFIC

The amount and type of traffic at an exhibit or Web Site is a more quantitative measure of effectiveness. By tracking the visitors to the EML exhibit or Web Site, EML can determine whether it is reaching its targeted audiences.

DOCUMENT REQUESTS

The number of requests to the Publications Office for specific documents and the source of those requests also provides semi-qualitative data that helps determine whether the products are reaching their intended audiences.

NUMBER OF COPIES USED

A final qualitative measure that can point to the effectiveness of a communication product is the number of copies: (1) distributed to existing mailing lists, (2) offered at conferences, and (3) handed out by EML staff at meetings.

ATTACHMENT 1. PUBLICATION GUIDANCE

INTRODUCTION

This EML Publication Guidance identifies the forms of publications to which it applies, and gives the procedures to be followed for the administration and peer review required, and the mechanisms to resolve disputes.

The underlying principle of this guidance is that all proposed publications will be reviewed and the authors are responsible for having their manuscripts reviewed by their colleagues in the field.

FORMS OF PUBLICATIONS

The forms of publication covered by this guidance document include all or identifiable parts of the following:

- Peer-reviewed journal articles, review papers, notes, letters to editor, etc.;
- Conference Proceedings;
- Books and Monographs;
- EML/DOE or other government reports, or contributions to reports published by another Laboratory or Institution;
- Abstracts and Summaries

MANUSCRIPTS PROCESSING PROTOCOLS

- Manuscripts should be reviewed by all of the authors. The order of listing of names should be agreed upon by all authors before submission of the papers for review. The rights of all authors should be respected and their names should not be included in anything that goes against their scientific views.
- The lead author is responsible for ensuring that the manuscript is reviewed and processed properly. Typically, two peer reviews are required, but the Division Director can allow only one under unusual circumstances. If the lead author wants the process of the peer review waived, the Division Director must approve this waiver.
- The Division Director should be informed of the initiation and kept abreast of the status of manuscripts at all times by the lead author. When the manuscript is sent to the peer reviewers, the lead author notifies the Publications Office who then logs it into the EML computer tracking system.

- After the peer reviews are returned and the lead author and co-authors feel that the manuscript is ready for publication, it should be given to the lead author's Division Director for review with the peer reviews attached. The period of time for the Division Director's review should be no more the three (3) weeks.
- After approval by the Division Director, the manuscript and peer reviews are forwarded to the Director's Office by the author with sufficient time for approval prior to the manuscript due date. In the event that the Division Director does not review the manuscript in the allotted time, the lead author will automatically forward it with the peer reviews to the Director's Office. If a Division Director asks for substantial changes that impact on the scientific focus of the paper, he/she will write these as comments and send them back to the author. If, after sufficient negotiations with the Division Director, the author chooses not to incorporate these changes. He/she must send the Division Director's comments o the Laboratory Director and defend his/her objections to the comments.
- The attached route slip, available from the Publications Office, should accompany the manuscript during the review process to ensure that all authors, the Division Director and the Laboratory Director have reviewed and approved it.
- Graphics and editorial service may be used at any time before or during the review process subject to the approval of the respective Division Directors. The Publications Office will notify the author of any proposed changes. If a disagreement arises between the lead author and the Publications Office, the matter will be addressed by the Division Director.
- After approval by the Director's Office, the Publications Office will submit the manuscript to the appropriate publisher. If the authors are submitting a manuscript to an outside publisher without the use of the Publications Office, the lead author will send a copy of the transmittal letter and the manuscript to the Publications Office for record keeping purposes. In the case of EML reports, the manuscript is given to the Publications Office for publication by the Government Printing Office.
- After submission of the manuscript to the publisher, the lead author will inform the Publications Office of the subsequent status of the manuscript so that the tracking record can be kept current.
- All conflicts should be resolved by the participation of the lead author [with the co-author(s) concurrence(s)], Division Director, and (if necessary) the Director's Office.

PUBLICATIONS OFFICE

The use of the services of the Publications Office is voluntary. The Publications Office may be utilized to work with the author to improve the clarity, organization, style, format and/or illustrations of the manuscript to conform to the requirements of the intended publisher. In the case of EML reports, the Laboratory will issue a Style Manual to provide similar requirements, and the publisher will be the Government Printing Office. All manuscripts given to the Publications Office will be handled in a timely manner.

The Publication Office will log in the progress of all manuscripts after the manuscript is sent to the peer reviewers using the EML computer tracking system. The Publications Office is also required to keep a copy of all submitted manuscripts.

ATTACHMENT 2: PREPARATION GUIDANCE FOR EML REPORTS

INTRODUCTION

This style manual is intended to improve the clarity in the presentation of written material for EML reports. The intention is not to set rigid rules but to have our reports understandable by our expected audiences. Certain journals may require specific usages or notations and of course these should be followed.

FORMAT

All EML reports must be created in or converted to Word, Times New Roman, 12 points. Instructions for the Word setup are available as a template[2] on the "M" drive. **Note:** A double spaced version of your draft should be submitted for the internal review process. The final copy should not be prepared until the report has been approved.

ABSTRACTS

Every EML report must have an abstract. An abstract is one concise paragraph depicting the most important information of the report. The abstract should contain a short statement of the purpose or objectives of the study, a brief description of the methods, and major conclusions.

TABLE OF CONTENTS

Include a Table of Contents, as appropriate depending on the number of pages and headings, in every EML Report.

STYLE REQUIREMENTS

- Use third person when writing the report: avoid using first person.

---

[2]Copy the template to your Word directory. **Do not edit or move the template.**

- Be sure to include the following section headings with the report as they apply, such as: *Introduction, Materials and Methods, Results, Discussion*, *Conclusions, etc*.

- Main headings, mid- and sub-heads should be obvious to avoid confusion (see the template).

- Use metric and SI units (see the appendix for further guidance).

- Indent all paragraphs five spaces (1/4 inch). The right margin should not be justified.

- Do not begin a sentence with a numeral. Rephrase the sentence or spell out the number and the unit of measure if there is one. (For example, Radon-222 was used ... not ... ^{222}Rn was used.)

- Spell out the full name of elements (strontium, iodine), except when nuclide mass numbers are used (^{90}Sr, ^{131}I).

- Capitalize and spell out Table 1, Figure 1, and Equation (1) in the text.

- The first time an abbreviation or acronym appears, it should be preceded by the full name for which it stands.

- Spell out numbers one through nine unless they precede a unit; spell out the words gamma, alpha, and beta.

- Use negative exponents instead of slashes, e.g., 1 Gy y^{-1} rather than 1 Gy/y.

- Use abbreviations of units and the symbol for percentage (%) only when preceded by a numeral, e.g., 30% or 1 Bq.

- Include the complete product designation and manufacturer's full name and address in the text where trademarked items and other equipment are first mentioned.

- Use the abbreviations for second (s), minute (min), hour (h), day (d), year (y) and liter (L) when preceded by a numeral.

- Use a space between the number and the symbol to which it refers. For example: 7 m, 31.4 kg, etc.

- Underline M for molarity and N for normality.

REFERENCES

Cite references in the text by author name and date. When a reference has two authors, give both names (Shebell and Hutter 2001). When a reference has more than two authors, give the first name listed and "et al." (Leifer et al. 2001).

- Journal articles:

Reginatto, M., P. Shebell, and K. M. Miller
An Application of the Maximum Entropy Method for Assessments of Residual Radioactivity at Contaminated Sites
IEEE Trans. Nucl. Sci. 43:1837-1841 (1996)

- Books:

Fisenne, I. M., P. M. Demoleas, and N. Harley
Thorium Excretions From a Thorotrast Patient
W. Gossner, G. B. Gerber, U. Hagen and A. Luz (Editors)
In: *The Radiobiology of Radium and Thorotrast*
Urban & Schwarzenberg, Muchen, Vol. 1, Chapter 2, pp. 151-156 (1986)

- Reports:

Shebell, P. and A. R. Hutter
Environmental Radiation Measurements at the Former Soviet Union's Semipalatinsk Nuclear Test Site and Surrounding Villages
USDOE Report EML-584 (1996)

- Proceedings

Leifer, R., R. H. Knuth, S. F. Guggenheim, and H. N. Lee
Design of the Aerosol Manifold for the Southern Great Plains Site
Proceedings of the Fourth Atmospheric Radiation Measurement (ARM) Science Team Meeting, pp. 227-231 (1995)

TABLES

See the template and a recent EML report for the formatting of tables. The tables may be imbedded (in the final version only) in the text or placed at the end; be consistent. Also, please adhere to the following guidelines:

- Clearly identify each column and row.
- Give units in parentheses using negative exponents rather than slashes.
- Table number and title should be bolded, centered and all caps. Normal capitalization should be used in headings and footnotes (e.g., Average surface activity) - no bolding.
- Use only horizontal lines to separate components of tables.

FIGURES

A camera ready print (not to exceed 8 ½ x 11 inches with 1 inch margin all around) and a Word compatible computer file are required for each figure. The figures may be imbedded (in the final version only) in the text or placed at the end; be consistent. The figure number should be bolded, flush left and the caption typed in sentence form, as follows:

Figure 1. The caption is in sentence form.

See the template and a recent EML report for the formatting of figures.

EQUATIONS

Center and number each equation, for example:

$$a + b = c \qquad (1)$$

where:

a = airplanes
b = boats
c = cars

EML Log No. _____*

EML PUBLICATION ROUTE FORM

Authors(s): _____

_____

_____

Title: _____

_____

For submission as: _____
(Journal article, EML report, Procedure (HASL-300), Symposia, etc.
identify publisher)

Submission due date: _____

Reviewed by:	Date In	Signature	Date Out
Co-authors:	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
Peer(s) Names:	_____	_____	_____
	_____	_____	_____
Division Director:	_____	_____	_____
Director's Office:	_____	_____	_____
Publication Office:	_____	_____	_____

*Generated by computer

ATTACHMENT 3. EML MARKETING TEAM CHARTER

INTRODUCTION

EML's Marketing Team will design and use displays, both externally and internally, as strategic communications tools. The team will take into consideration EML's goals in the area of communication and will make decisions for displays based on:

- affecting perceptions
- enhancing awareness
- identifying audiences' capabilities and needs
- identifying interested audiences for future targeting
- getting feedback on message content

The Marketing Team will also use headquarters communication guides, such as: the OST Communication Plan and Exhibit White Paper, and the information obtained through participation in the OST Communication Working Group as resources to make knowledgeable recommendations.

TEAM CHARTER

- Design a new exhibit and keep it up to date.
- Suggest appropriate meetings to management for EML to display it core capabilities.
- Suggest appropriate EML staffers for specific meetings.
- Train EML booth staff on all of the Laboratory's capabilities.
- Develop give-aways/freebees that relate to EML (at a cost of no more than $1.00 per freebee).
- Identify communication products to bring to meetings.
- Develop non-traveling displays around the Laboratory

Appendix B

EML GOALS AND PERFORMANCE TARGETS

EML GOALS AND PERFORMANCE TARGETS

For each of the four broad-based EML goals, separate program management areas, along with FY 2002 targets and completed or contemplated actions are specified in this Appendix. Each goal is cross referenced to the CH Strategic Plan Goals and Objectives, and CH Strategic

EML MANAGEMENT GOAL

EML will be structured and its technical programs oriented to take advantage of opportunities and contributions to EM and CH strategic plans, their realignment goals, and the National Performance Review.

Overall Budget (CH Strategic Plan Goal CM; CH Strategic Priority CHP-7)

Performance Target (FY 2001): $ 8.1 M – Funds adequate to maintain EML Programs and achieve mission goals.

Status (FY 2001): Successful - EML met budgetary requirements despite the unplanned and unannounced reduction in Program Direction funding three months into the fiscal year. This was accomplished through reductions in training, suspension of hiring in critical positions and instituting a 3-year computer recycle.

Performance Target (FY 2002): $7.7M- funds adequate to maintain EML programs and support customer needs.

Actions/Goals (FY 2002):
- Discussions and interactions with EM, other customers, and CH to maintain relationships and increase funding.
- Continue to develop new customers.
- Continue to perform cost-sharing projects.

Budget for Capital Equipment and Facility Maintenance Needs (CH Strategic Plan Goal CM, CH Strategic Priority CHP-7)

Performance Target (FY 2001): $200K for equipment and infrastructure improvements to maintain EML's capabilities.

Status (FY 2001): Partially Successful -
- Specific targeted funds were adequate to invest in targeted customer projects and infrastructure but not for infrastructure and instrument modernization
- Successful for targeted funds.
- Not successful for infrastructure and instrument modernization.

Performance Target (FY 2002): Funds adequate for equipment and facilities improvements to maintain EML's capabilities in FY 2002.

Actions/Goals (FY 2002): Investigate potential customers for funds for equipment for program specific needs in FY 2002. Work with CH to fund EML's Program Direction budget sufficiently to provide funding or equipment modernization and facility upgrades.

HQ and CH Oversight of Operations (CH Strategic Plan Goal CM; CH Strategic Priorities CH- 1, CHP-3, CHP-6)

Performance Target (FY 2001): Twenty visits from EML to HQ; 5 visits from HQ staff to EML; one visit by EM-HQ senior management to EML.

Status (FY 2001): Successful - Forty-six visits from EML to HQ; 8 visits from HQ staff to EML; 2 visits by EM-HQsenior management to EML. An EML staff member continues to be assigned to EM HQ to assist with liaison with the laboratory. An EML staff member continues to represent the Laboratory at CH. An EML staff member continues to represent the Laboratory at SC.

Performance Target (FY 2002): Twenty visits from EML to HQ; 5 visits from HQ staff to EML; 1 visit by EM-HQ senior management to EML; 5 visits to CH; 4 visits CH staff or management to EML.

Actions/Goals (FY 2002): Continue to meet HQ and CH expectations. Continue in person contact, written reports, voice and electronic communications with HQ and CH.

DOE Customer Base (CH Strategic Plan Goal SP; CH Strategic Priority CHP-7)

Performance Target (FY 2001): Maintain EML's current DOE customers and add to them if possible.

*Status (FY 2001)***:** Successful - EML's DOE customer base maintained (EM, SC, NN). Expanded the CH-EM customer. Successfully integrated work projects within the "One CH" goal.

Performance Target (FY 2002): Maintain EML's current DOE customers and add to them if possible.

Actions/Goals (FY 2002): Visits/presentations for every major customer.

WFO Customer Base (CH Strategic Plan Goal SP; CH Strategic Priority CHP-7)

Performance Target (FY 2001): Maintain EML's WFO customers. Increase support from existing WFO customers and add to them if possible.

Status (FY 2001): Partially successful - EML's WFO customer base maintained. Increased WFO funding did not materialize.

Performance Target (FY 2002): Maintain EML's WFO customer base. Increase support from existing WFO customers.

Actions/Goals (FY 2002): Visits/presentations to every major WFO customer.

Customer Satisfaction (CH Strategic Plan Goal CM; CH Strategic Priorities CH-4 and CHP-6)

Performance Target (FY 2001): Customer Satisfaction survey indicates an overall rating of 100% very satisfied or satisfied.

Status (FY 2001): Not Applicable - Per CH recommendation, formal Customer Satisfaction survey not conducted in FY01. In lieu of this, EM-HQ intensive external program review of EML resulted positive feedback from our major customer. Informal customer surveys continue to indicate a high level of satisfaction.

Performance Target (FY 2002): Overall rating of 100% very satisfied or satisfied.

Actions/Goals (FY 2002): Continue to interact with customer s to ensure feedback.

Project Reviews, Planning and Operation (CH Strategic Plan Goal CM; CH Strategic Priorities CHP-1, CHP-2, CHP-4, CHP-5)

Performance Target (FY 2001): Review 6 major technical projects in detail through the implemented formal EML Internal Project Review process.

Status (FY 2001): Successful - Nine EML Projects were reviewed in detail. Thirteen Project Plans were developed or modified. Quality Assurance Performance Plans (QAPPs) are maintained and up to date.

Performance Target (FY 2002): Review six EML technical projects.

Actions/Goals (FY 2002): All EML Projects are reviewed by management on a tri-annual basis. QAPPs are updated annually. Standard Operating Procedures (SOPs) are assessed.

Internal QA (CH Plan Goal CM; CH Strategic Priorities CHP-1; CHP-2; CHP-4; CHP-6)

Performance Target (FY 2001): The system to ensure an internal QA culture within EML is reexamined and readjusted as necessary.

Status (FY 2001): Successful - The system to ensure an internal QA culture within EML continues to operate successfully. Refresher training has been provided.

Performance Target (FY 2002): The system is reexamined and readjusted as necessary.

Actions/Goals (FY 2002): Revise system as required including: review control documents as required; conduct annual assessments on schedule; track corrective action plans.

Integrate GOGO Laboratories into the CH Portfolio (CH Strategic Plan Goal SP and CM; CH Strategic Priority CHP-6)

Performance Target (FY 2002): Work more closely with CH.

Actions/Goals (FY 2002): Increase communication with CH.

Develop a Process for Development of Effective Working Relationship with CH. (CH Strategic Plan Goals SP and CM; CH Strategic Priority CHP-6)

Performance Target (FY 2002): Develop a plan.

Actions/Goals (FY 2002): Institute the process.

Develop an Inventory and Analysis of EML's Available Skills. (CH Strategic Plan Goal SP; CH Strategic Priority CHP-6)

Performance Target (FY 2002): Develop an inventory.

Actions/Goals (FY 2002): Complete the analysis.

Identify Opportunities for Integration of the Technical Resources of the GOGOs into the other CH functions (CH Strategic Plan Goal SP; CH Strategic Priority CHP-6)

Performance Target (FY 2002): Identify resources.

Actions/Goals (FY 2002): Interact with other GOGOs.

EML TECHNICAL PROJECT EXECUTION GOAL – QA, ENVIRONMENTAL MEASUREMENTS AND INNOVATIVE RESEARCH AND TECHNOLOGY

EML will be recognized as a key federal resource in addressing critical issues in environmental measurements for DOE and other national and international organizations. This will include strong technical and QA roles in field measurements for environmental

contamination investigations, long-term stewardship, decontamination and decommissioning programs, emergency response, and matters relating to nuclear treaty monitoring. Innovative research and technology development will be required to maintain state-of-the-art skills.

QAP Customer Relationships (CH Strategic Plan Goals SP, SC and CS; CH Strategic Priorities CHP-4, CHP-7)

Performance Target (FY 2001): Maintain prime QAP customers.

Status (FY 2001): Successful - Prime QAP participants increased.

Performance Target (FY 2002): Maintain twice a year, timely performance sample distribution.

Actions/Goals (FY 2002): Conduct presentations to existing participants and users and new potential participants so that they better understand the benefits of participating in QAP.

Instrument and Methods Development (CH Strategic Plan Goals SP, SC and CS; CH Strategic Priority CHP-4)

Performance Target (FY 2001): Not applicable, new action.

Status (FY 2001): Not applicable, new action.

Performance Target (FY 2002): Maintain an active program of instrument and methods development.

Actions/Goals (FY 2002): Seek demonstration sites for recently developed technologies.

Field QA Related to Low-level Radioactivity and Radiation Measurements (CH Strategic Plan Goals CS, SC and SP; CH Strategic Priority CHP-4)

Performance Target (FY 2001): Complete the Environmental Dosimetry 12th Intercomparison.

Status (FY 2001): Successful - The Environmental Dosimetry 12th Intercomparison was completed

Performance Target (FY 2002): Continue to provide field QA services to the DOE Complex. The Third Gamma-Ray Spectrometry Evaluation Intercomparison will be performed.

Actions/Goals (FY 2002): Conduct presentations to existing participants and users and new potential participants so that they better understand the benefits of participating in

EML QA programs. Continue to expand reference stations with NIST for RTP. Conduct *in situ* gamma-ray intercomparison comparability field exercises.

EM HQ Programs, Including Special Efforts in Site Closure and Long-term Stewardship (LTS) and Emergency Response (CH Strategic Plan Goals SP; CH Strategic Priorities CHP-3, CHP-4; CHP-6)

Performance Target (FY 2001): Continue participation in appropriate EM programs. Continue to participate in the LTS program. EML core expertise is fully utilized by EM.

Status (FY 2001): Successful - An EML staff member continues to be assigned to EM HQ to assist with LTS and other areas. All segments of EML's core expertise are utilized by EM HQ. EML has significantly increased its participation in EM-5 HQ programs.

Performance Target (FY 2002): Continue participation in appropriate EM-HQ programs. Continue to participate in the LTS program. EML core expertise is fully utilized by EM.

Actions/Goals (FY 2002): Build participation in LTS HQ meetings, reviews and workshops.

Technical Assistance to EM Field Sites (CH Strategic Plans Goals SP; CH Strategic Priorities CHP-4, CHP-5, CHP-7)

Performance Target (FY 2001): Continue to provide technical assistance to EM field sites.

Status (FY 2001): Successful - EML continued with the BNL, ETTP and FEMP Programs.

Performance Target (FY 2002): Continue to provide technical assistance to EM field sites.

Actions/Goals (FY 2002): Establish working relationships with additional EM field sites.

Global Networks and Remote Monitoring Operations for Additional and/or Other DOE and WFO Customers (CH Strategic Plan Goals SP, CS and SC; CH Strategic Priorities CHP-4, CHP-7)

Performance Target (FY 2001): Evaluate EML global network sites as Treaty Monitoring sites come online. Continue to look for new applications for the streamlined sites.

Status (FY 2001): Successful - EML network streamlined. New application for the EML network initiated for the Global Atmospheric Watch (GAW).

Performance Target (FY 2002): Establish new EML network site.

Actions/Goals (FY 2002): Fieldtrips and equipment installation at new sites. Redeployment of equipment to appropriate sites.

Patents for Innovations in Field Measurements for Environmental Contamination Investigations and Deactivation and Decommissioning and Awards for EML Research Activities (CH Strategic Plan Goal SC; CH Strategic Priorities CHP-4, CHP-5, CHP-6)

Performance Target (FY 2001): Continue to evaluate EML research activities for R&D awards. Pursue other patents based upon innovative research.

Status (FY 2001): Successful - Two patents applications are being processed. An additional patent application has been filed.

Performance Target (FY 2002): Pursue other patents based upon innovative research.

Actions/Goals (FY 2002): Evaluate EML projects for patent potential or award potential during EML Project Reviews.

Coordinate or Maintain Designated Programs or Projects for SC (CH Strategic Plan Goal SC; CH Strategic Priorities CHP-1, CHP-2, CHP-4)

Performance Target (FY 2001): Continue to coordinate DOE participation in the SERDP. Continue to fulfill SC requirements for the IARPC and related arctic –research subcommittees. Continue to maintain and provide technical support for the HSRD.

*Status (FY 2001)***:** Successful - SERDP, IARPC and HSRD all on track and performing up to the expectations of SC-70. An EML staff member continues to be assigned to SC-HQ to ensure that these programs operate successfully.

Performance Target (FY 2002): SERDP, IARPC and the HSRD continue on track and meet the expectations of OBER.

Actions/Goals (FY 2002): Continue close interactions with appropriate SC HQ managers. Continue to maintain in-person liaison at SC. Maintain appropriate computer hardware and software to ensure that these programs operate successfully.

Communication of EML Accomplishments Through Scientific Publications, Presentations, Exhibitions and Other Appropriate Venues (CH Strategic Plan Goals CM and SP; CH Strategic Priority CHP-4)

Performance Target (FY 2001): Develop a Communications Plan for FY 2002.

Status (FY 2001): Successful - The plan is developed and incorporated as an Appendix to

the EML 2002 Unit Performance Plan.

Performance Target (FY 2002): EML staff will produce a total of 15 publications and presentations, and 3 exhibitions.

Actions/Goals (FY 2002): Follow the goals and recommendations in the Plan. Track publications, presentations, and exhibitions. Foster the EML Marketing and Web teams and EML Publications Office and track their progress.

SUPPORTIVE AND SAFE EML ENVIRONMENT GOAL

EML will continue to maintain a safe employment environment through application of ISM principles. The Laboratory will also establish a supportive and rewarding work atmosphere that will attract, retain and motivate the staff to fulfill the scientific, technical, and administrative goals and responsibilities of EML.

Human Resource (HR) Management (CH Strategic Plan Goal CM; CH Strategic Priorities CHP- 1, CHP-2, CHP-3,CHP-6)

Performance Target (FY 2001): Complete transition of HR functions to CH. Continue to fill slots to replace separated staff. Investigate promotional opportunities for the staff.

Status (FY 2001): Successful - Transition of remaining HR functions to CH completed. Additional staff hired and promotions obtained.

Performance Target (FY 2002): – Bring in additional staff or promote current staff into in critical needs areas.

Actions/Goals (FY 2002): Develop a critical needs assessment.

Internal Communication (CH Strategic Plan Goal CM; CH Strategic Priorities CHP2, CHP4)

Performance Target (FY 2001): Contributions to EML continue to be acknowledged by the success of the Laboratory and are acknowledged by direct communications to the staff by the Laboratory Director and by Laboratory Management. Information availability continues to improve (e.g., EML Weekly Highlights, success stories, lab-wide e-mails).

Status (FY 2001): Successful - Instituted quarterly Town Meetings. The Labor-Management Relations Committee met.

Performance Target (FY 2002): Laboratory accomplishments are communicated to the staff by the Laboratory Director and management.

Actions/Goals (FY 2002) – Continue with the quarterly Town Meetings, Labor-

Management Relations Committee, and other appropriate communications efforts.

Employee Training (CH Strategic Plan Goal CM; CH Strategic Priorities CHP1, CHP-2, CHP-3, CHP-6)

Performance Target (FY 2001): All employees complete mandatory training activities, and all IDPs are kept up to date.

Status (FY 2001): Successful - All employees completed mandatory training and other selected activities and IDPs were updated as required. A coordinated effort with CH for computer training was successfully completed.

Performance Target (FY 2002): All employees complete mandatory training activities and all IDPs are kept up to date.

Actions/Goals (FY 2002): Employees receive non-mandatory skill training as budgets permit.

Awards and Recognition Program (CH Strategic Plan Goal CM; CH Strategic Priorities CHP1, CHP-2)

Performance Target (FY 2001): Evaluate and modify the Awards and Recognition program at EML as needed.

Status (FY2001): Successful - Expanded the Program to include "EML Plus 1", "EML Business Builder" and three EML Labor-Management Relations Committee awards; Teamwork," "Managers" and "Workplace Achievement."

Performance Target (FY 2002): Continue to implement the Awards and Recognition Program.

Actions/Goals (FY 2002): Recognize and reward employee achievements. Continue to identify innovative award categories and recognition mechanisms.

ES&H Documentation (CH Strategic Plan Goal CM; CH Strategic Priorities CHP1, CHP3)

Performance Target (FY 2001): Review and/or revise EML Safety Manual; hold appropriate ES&H briefings. Continue to incorporate ISM verification into the EML Safety Manual. Complete future ISM documentation requirements.

Status (FY 2001): Partially Successful - Revised the Plan and Safety Manual revision is underway.

*Performance Target (FY 2001)***:** Complete the revision of the EML Safety Manual.

Actions/Goals (FY 2002): Hold appropriate ES&H briefings. Continue to incorporate ISM verification into the EML Safety Manual.

ES&H Training (CH Plan Strategic Goal CM; CH Strategic Priorities CHP-1, CHP-2, CHP-6)

Performance Target (FY 2001): Appropriate ES&H is provided to ensure that all protocols are understood and followed.

Status (FY 2001): Successful - Specialized training for Safety Environmental Protection Officers (SEPOs) completed.

Performance Target (FY 2002): Provide specialized training for line management.

Actions/Goals (FY 2002): Continue to provide ES&H training to appropriate staff.

ISM Requirements and Opportunities for Improvement (CH Strategic Plan Goal CM; CH Strategic Priorities CHP-1, CHP-2, CHP-5)

Performance Target (FY 2001): Meet ISM opportunities for improvements in 6 areas.

Status (FY 2001): Successful - EML met ISM opportunities for improvements in 6 areas.

Performance Target (FY 2002): Complete annual ISM assessments.

Actions/Goals (FY 2002): Continue to meet requirements of ISM, including "Opportunities for Improvement."

CH ES&H Performance Metrics (CH Strategic Plan Goal CM; CH Strategic Priorities CHP-2, CHP-5; CHP-6)

Performance Target (FY 2001): Zero occurrences for each of the "Critical Few CH ES&H Performance Metrics (reportable occurrences, environmental releases, lost work cases, recordable radiation exposure)."

Status (FY 2001): Successful -
Reportable occurrences = 0
Environmental releases = 0
Lost work cases = 0
Recordable radiation exposure cases = 0

Performance Target (FY 2002): Zero occurrences for each of the "Critical Few CH ES&H Performance Metrics."

Actions/Goals (FY 2002): Continue to maintain a safe work environment through training, supervision, assessment and facility maintenance upgrades.

ADMINISTRATIVE GOAL

EML will improve administrative efficiency to support the technical and scientific staff in fulfilling the Laboratory's mission in a timely and productive manner.

Needs and Priorities for Administrative Services (CH Strategic Plan CM; CH Strategic Priorities CHP-1, CHP-2, CHP-5, CHP-6)

Performance Target (FY 2001): Continue effective administration services to support EML technical staff.

Status (FY 2001): Successful - Increased our space and decreased the cost per square foot. Completed Phase III-A of the facilities consolidation.

Continued effective administration services to support EML technical staff.

Performance Target (FY2002): Continue effective administration services to support EML technical staff.

Actions/Goals (FY 2002): Complete the EML sample archive. Relocate the fallout library. Establish a records management procedure. Plan laboratory facility revitalization.

Information Architecture Planning (IAP) (CH Strategic Plan Goal CM; CH Strategic Priorities CHP-5, CHP-6)

Performance Target (FY 2001): Participate as appropriate in CH IAP.

Completed Actions and Status (FY 2001): Successful - Participated in IAP Reference Group. Participated in CH FY 2001 Operations Plan ad hoc committee.

Performance Target (FY 2002): Participation as appropriate in IAP.

Actions/Goals (FY 2002): Participation as appropriate.

GOALS AND RECOMMENDATIONS FROM THE HQ-CH EXTERNAL PROGRAM REVIEW

A Board of Advisors That Reports to the Director of EML Should Be Established Promptly (EM-1)

Performance Target (FY 2002): Establish a board of advisors.

Actions/Goals (FY 2002): Contact appropriate board members.

EML Should Strengthen Its Use of Peer Review Processes for Programmatic and Management Issues (EM-2)

Performance Target (FY 2002): Install appropriate peer-review processes.

Actions/Goals (FY 2002): Contact other DOE organizations and federal organizations that utilize peer-review processes.

The Laboratory's Strategic Planning Processes and Its Approach to Securing Resources to Meet Institutional Staffing and Infrastructure Needs Should Be Improved (EM-3)

Performance Target (FY 2002): Ensure that the Laboratory's strategic planning processes for securing resources to meet institutional staffing and infrastructure is improved.

Actions/Goals (FY 2002): – Develop a plan.

EML Should Develop a Technology Transfer Plan for Intellectual Property Management and Ensure Proper Goals And Management Provisions are in Place for Such Activities (EM-4)

Performance Target (FY 2002): Develop a plan.

Actions/Goals (FY 2002) - Interact with CH on appropriate actions.

The "Chain of Command" for Work for Others Needs to be Clarified. (EM-5)

Performance Target (FY 2002): Clarify the chain of command for WFO.

Actions/Goals (FY 2002): Interact with HQ and CH on appropriate actions.

Because of the Uniqueness of EML's Expertise and Capabilities, EML Should Make a Concerted Effort to Increase DOE's Understanding and Appreciation of EML's Skills and Capabilities Within Headquarters and the Rest of the Complex. (EM-6)

Performance Target (FY 2002): Two presentations by EML technical staff to HQ and two presentations to the DOE National labs.

Actions/Goals (FY 2002) – Increase communication/interaction with HQ.

Increased the Number of Strategic Partnerships Between EML and Other GOGO Laboratories, the Multi-program Laboratories, and Other R&D Institutions. (EM-7)

Performance Target (FY 2002): Initiate at least one strategic partnership.

Actions/Goals (FY 2002): Contact appropriate R&D institutions.

Benchmark EML Against Other R&D Laboratories (Including GOGO's and Contract Laboratories) to Establish Performance Metrics in Publications, Presentations, Patents, ES&H Performance, and Cost Management (EM-8)

Performance Target (FY 2002): Prepare a plan to initiate benchmarking.

Actions/Goals (FY 2002): Contact appropriate R&D institutions to establish performance metrics, etc.

Increase the Use of Co-ops, Interns, Graduate Students, and Post-docs. (EM-9)

Performance Target (FY 2002): Obtain at least 1 co-op, intern, graduate student, or post-doc.

Actions/Goals (FY 2002): Interact with local institutions of higher learning.

Apply EML's National Security and QAP Work to LTS (EM-10)

Performance Target (FY 2002): Increase participation of EML in LTS

Actions/Goals (FY 2002): Expand HQ interactions related to LTS.