

Fiscal Year 2004 (FY04)
Environmental Protection and Waste Services Division (EP&WSD) and the
Environmental Management System (EMS) Business Plan
October 1, 2003

This document was prepared by the management of the Environmental Protection and Waste Services Division (EP&WSD) at Oak Ridge National Laboratory.

Section 1: High Level Expected Outcomes and Associated Measures

The implementation of an Environmental Management System (EMS) allows us to identify, assess, and control the impact that U.S. Department of Energy (DOE)/UT-Battelle, LLC (UT-Battelle) activities and facilities have on the environment. The EMS is designed to ensure that our activities and facilities are in compliance with environmental laws and regulations, permits, and relevant DOE Orders.

It is our goal to make sure that everyone at Oak Ridge National Laboratory (ORNL) understands their environmental management responsibilities so that we can work together to improve our working conditions and our environment.

The outcomes we expect for the ORNL EMS include the following:

- Enable world-class research/operations by refining the efficiency and effectiveness of the EMS and its services (waste management operations and environmental compliance) as measured ultimately by sustained compliance and the achievement of International Organization for Standardization (ISO) 14001 Registration.
- Continue to ensure compliance with applicable environmental requirements as measured by the UT-Battelle performance assessment system, external regulatory inspections, and independent oversight. Key measures include reportable releases to the environment, permit non-conformances, regulatory inspection findings, and Notices of Violation (NOVs).
- Continue to identify and eliminate environmental vulnerabilities and legacy materials, as allowed by funding, and as measured by the disposition of legacy materials.
- Integrate pollution prevention into work planning and execution as measured by reduced generation of certain pollutants and identification of break-through means to reduce, eliminate, or treat more problematic wastes (i.e., transuranic {TRU} sludge).
- Preparation for DOE's Office of Environmental Management (EM) Accelerated Closure initiatives, expanding from waste management to include Long-Term Stewardship liabilities not included in the DOE EM baseline or in the DOE Office of Science (SC) programmatic funding.

Section 2: Situation Assessment

The result of the FY02 self-assessment included a corporate review of the Waste Certification process concluding around mid-year, and an Office of Independent Oversight (IO) evaluation of the Environmental Protection and Waste Services Division's (EP&WSD) performance assessment in accordance with the Performance-Based Management System (PBMS) to be reported in August. We will conclude FY03 with a review of the UT-Battelle EMS against the ISO 14001 requirements (for the purposes of preparing for ISO 14001 registration in FY04), and assessing management system maturity. In addition, major regulatory areas were inspected and assessed by the state regulators, and a multi-media review was conducted by the Environmental Protection Agency (EPA). EPA's multi-media reviews evaluate regulatory compliance at government facilities operated by contractors and principally regulated by an "agreement state" with EPA. Based on the results of these reviews and inspections, combined with the balance of self assessment activities, including customer satisfaction and budget/cost analyses, as well as consideration of external activities such as DOE EM's accelerated closure planning, we have concluded the following:

- Division processes for business planning and self assessment are improving, but are not yet "Best-in-Class". We must improve processes for documenting, reporting, and correcting quality problems at the division level.
- Compliance with environmental requirements is generally effective at both the ORNL and division level. However, legacy issues are adversely affecting operational cost and safety and may, in some cases, threaten our compliance status. ORNL continues to face a substantial and costly effort to eliminate legacy materials that pose a hazard or impede facility revitalization. Corrective action presents both funding and staffing challenges at ORNL and EP&WSD levels.
- The Waste Certification Program was re-engineered in concept and structure in FY03 for the purposes of improving waste management operations and to develop readiness for assuming responsibility for newly generated waste. The Division's modifications to the supporting infrastructure (Standards-Based Management System {SBMS}, operating software and division procedures) must continue to be executed in the first half of FY04 to effect transition to the new process and to realize the benefit of these changes.
- Improvements in operational discipline and accountability, particularly in the areas of performance assessment and work control, are needed to increase emphasis on pollution prevention and waste minimization, and in evaluating environmental aspects of work. This is considered to be the case at the Lab level and EMS/EP&WSD must work to affect improvement.
- DOE activities indicate there is a probability that substantial liabilities will be incurred to ORNL as DOE EM's mission and funding are systematically diminished at the national level. Efforts need to be expanded to determine the remedial and maintenance actions that are not covered in the DOE EM baseline and to control the resultant impact to ORNL and UT-Battelle.

Section 3: Objectives and Actions

Based on our situation, assessment, and the stated strategic intents of the Level 1 Environment, Safety, Health, and Quality Directorate (ESH &Q) plan's, we have established five objectives for the EMS to be executed by the EP&WSD.

Objective 1 – Customer Focus

Safely operate the EP&WSD in a manner that

- provides high quality services;
- is responsive to internal and external customers expectations in effectively implementing environmental management programs to reduce/eliminate legacy challenges;
- provide environmental protection and compliance support; and
- manage and disposition waste to protect health and the environment.

The target is to ensure and maintain satisfied customers.

Actions

- Effectively manage purchased services (i.e., Environmental Compliance Representatives {ECRs} and Waste Service Representatives {WSRs}), improving customer service measures and responses to ensure customer satisfaction.
- Prepare the Annual Site Environmental Report (ASER).
- Enhance and maintain web sites for EP&WSD as a resource for customers to assist them in understanding the processes in effectively reducing/eliminating legacy waste, providing environmental protection and compliance support, and managing and dispositioning waste.

Objective 2 – Financial Performance

Establish and manage the EP&WSD budget to effectively and efficiently meet the division mission with a target of achieving an overall “Outstanding” rating at the end of the fiscal year.

Actions

- Conduct FY05 EMS Plan and Budget preparation.
- Ensure spending is consistent with the projected budget.
- Maintain a constant rate and increase the direct charge percentage of the total EP&WSD budget.

Objective 3 – Staff Results

Maintain a pool of talented, empowered, motivated, and goal-oriented staff to support and enhance EP&WSD services to ORNL.

Actions

- Plan for staff development through the EP&WSD succession plan and document in the Performance Assessment and Development System (PADS).
- Promote education of staff through the laboratory reimbursement program for continued college-level education and technical job related courses for professional development.
- Ensure personnel have the appropriate baseline training to perform their jobs.
- Promote diversity within the division as specified in the ORNL Equal Employment Opportunity (EEO)/Work Force Diversification (WFD) Performance Measures.

Objective 4 – Organizational Effectiveness

Objective 4.1

Improve business planning, organizational/operating efficiency, performance assessment, analyses, and corrective action execution with a target of achieving a score of 3.0 in a follow-up review against IO's criteria and ultimately achieving ISO 14001 Registration.

Actions

- Realign and execute an EP&WSD functional organizational structure to support the UT-Battelle business model as detailed in the PBMS.
- Develop a Corrective Action Plan and comprehensive Performance Assessment Plan in response to IO's FY03 review within 45 days of receipt of the final report. Execute these plans in the first quarter of FY04.
- Continue to refine the EMS for ISO 14001 Registration review after mid-year.
- Continue outsourcing analytical services (e.g., National Emission Standards for Hazardous Air Pollutants {NESHAP}, National Pollutant Discharge Elimination System {NPDES}) where appropriate.
- Develop and implement division operating procedures.

Objective 4 – Organizational Effectiveness

Objective 4.2

Complete and execute re-engineered Waste Certification Program with a target of a third quarter FY04 IO-follow-up verification assessment.

Actions

- Complete all actions developed in response to the Waste Certification Program (WCP) Development Team recommendations by January 31, 2004.
- Establish measures of performance and verification/validation (e.g., process and data quality) activities in the WCP by December 15, 2003.
- Determine effectiveness of the WCP corrective actions and new certification process through an IO verification assessment in the third quarter of FY04.
- Assuming purchase in FY03, install, test, and de-bug data storage and waste tracking systems by September 30, 2004.

Objective 4 – Organizational Effectiveness

Objective 4.3

Aggressively pursue ORNL culture change with respect to pollution prevention, waste minimization, and environmental compliance aspects of work planning and execution. Improve integration of pollution prevention into line organization (Operations and Research) work planning and control.

Actions

- Reduce routine waste generation by 50% by FY06, with a 25% reduction by the end of FY04, to achieve a significant reduction in anticipated cost associated with the transition of newly generated waste.
- Engage line organizations in ongoing and strategic pollution prevention planning and execution processes to enhance field deployment of pollution prevention strategies and improvements in work control/planning processes.
- Participate in a minimum of two voluntary and joint Pollution Prevention Opportunity Assessments by September 30, 2004.
- Develop easy access to pollution prevention guidance by developing and deploying a “How Do I Manage This Waste Stream” web site that promotes effective work planning and provides consistent guidance on pollution prevention and recycling options by December 31, 2003.
- Aggressively pursue execution of Affirmative Procurement and continued use of the Chemical Management Center (CMC) to reduce the quantities of chemical and materials procured and managed (and thus, the resultant excess/surplus).

Objective 5 – Compliance

Objective 5.1

Continue to effectively execute compliance programs and waste operations. Targets are implicit – zero regulatory non-compliances in ongoing operations.

Actions

- Provide and maintain a safe work environment through implementation of the ORNL Management System – Safeguards and Security.
- Continue to disposition newly generated waste and minimize the need for storage capability for hazardous waste.
- Ensure the SBMS/EMS is consistent with changing regulatory requirements and UT-Battelle processes.
- Perform sampling/monitoring per permits, regulations, and DOE Orders.
- Complete and submit all required reporting.
- Support Title V and NPDES permit/renewal negotiations and implementation.
- Complete a Historic Preservation Plan by May 2004.

Objective 5 – Compliance

Objective 5.2

Continue the elimination of vulnerabilities and legacy materials from facilities. Targets are implicit – removal of materials as funding availability permits.

Actions

- Remove and disposition excess chemicals from labs and rooms reducing the hazardous footprint.
- Remove and disposition remaining excess pumps and motors identified during FY03
- Perform priority ORNL tasks (e.g., B-25 boxes, remote-handled TRU waste pilot)
- Perform priority Y-12 tasks (e.g., Building 9204-1 inventory).

Objective 5 – Compliance

Objective 5.3

Develop a program to determine remedial and maintenance actions disappearing from or not included in EM's baseline with the intent to control impact on ORNL programs in the future (e.g., the Stewardship, Waste, Infrastructure, Facilities Team {SWIFT}).

Actions

- Expand efforts to manage risk associated with remedial action and waste management liabilities not included in the DOE baseline by establishing a viable SWIFT initiative.
- Continue to identify and exploit opportunities to influence the conduct of DOE EM/Bechtel Jacobs Company LLC (BJC) activities to reduce ORNL liabilities.
- Continue to develop and execute the transition plan for assumption of responsibility for newly generated waste. Readiness actions include a low-level waste (LLW) pilot and continuation of the hazardous waste pilot.
- Obtain Nevada Test Site (NTS) certification by September 30, 2004.

Section 4: Issues and Support Needs

This Plan assumes some work-at-risk and has no contingency or ability to withstand mid-year cuts. Failure to perform tasks required by regulation could result in fines and penalties and in public relations/community support issues.

A potential compliance issue exists with the move toward outsourcing NESHAPs and NPDES permit-required Laboratory analytical work. Working with an out-of-town or out-of-state laboratory will increase the possibility of sample loss. This is not an issue that would benefit from additional funding resources, but is an issue of risk awareness and acceptance.

Without continued effective planning, the Laboratory could suffer serious negative financial impacts in unexpected and unbudgeted costs from the transition of newly generated waste. The development of waste strategies for all waste streams will provide cost-effective solutions and lower costs to our scientific and operations customers. It also requires an investment of resources prior to, and regardless of, the timing of transfer in responsibilities for newly generated waste. While we have been able to locally transfer waste disposal funding for hazardous waste and acquire written direction from DOE, contract modifications from DOE are preferable from a liability perspective.

Registration to the ISO 14001 standard will provide UT-Battelle with a third party endorsement of its EMS, giving the Laboratory an edge over its competition and improving community perception. Pollution prevention planning will aid the Laboratory in reducing pollutants and wastes at the source, minimizing the cost of waste management and other environment, safety, and health (ES&H) programs in the future.

Note: Both ISO 14001 registration and pollution prevention activities will benefit more from active Senior Management endorsement than additional funding in FY04.

Potential annual savings from the implementation of an improved/new waste tracking system/database are expected to be at least the equivalent of 1 full-time employee (FTE) in FY05 and beyond. The amount requested is in excess of target (\$250), if buy down in FY03 is not possible.

Waste certification/acceptance costs in FY04 are expected to be about half of what they were in FY03. Charge-back costs under the newly designed organization are expected to remain essentially flat in FY04 (\$537,000 in FY03 vs. \$524,000 in FY04).

Failure to fund UT-Battelle Environmental Management Program activities could result in the:

- inability to reduce ORNL remedial action and waste management liabilities and/or increase programmatic funding for SWIFT activities;
- increased risk of ES&H impacts from poor coordination with DOE EM/BJC and loss of revenue from Work Authorization Directives due to decreased marketing; and
- decreased efficiency in performing overall Environmental Management Program tasks (budgets, performance reviews, etc.).