



Culture and Successful Implementation of an ISO 14001:2004 Certified Environmental Management System

**Catherine Alstatt
Director, Regulatory
Interface and Integration**

September 2010





Cathy Alstatt's Bio

- **Ms. Alstatt is the Director of Regulatory Interface and Integration at the Transuranic Waste Processing Center (TWPC) in Oak Ridge responsible for the overall implementation of environmental regulatory programs. She has over 23 years of experience in the environmental field. She has experience as a regulator working at the Colorado Department of Public Health and Environment (CDPHE) Hazardous Material's and Waste Management Division. She has over 20 years of experience working with radioactive and mixed radioactive waste, including the position of Environmental Compliance Manager for the waste management project at Rocky Flats. She has conducted numerous readiness assessments including Phase 1 ISMS implementation assessments at the Nevada Test Site. She has in-depth experience in environmental compliance, regulatory issues and strategies, environmental permitting, D&D, ISMS program implementation and waste characterization, and treatment.**
- **She is the ESH&Q Vice President for EnergX LLC which has offices in Colorado, Washington and Tennessee.**
- **At the TWPC she is responsible for the Environmental Program and led the effort to develop and implement a DOE O450.1 compliant Environmental Management System and achieved ISO 14001:2004 certification of that EMS. The certification audit was completed with no Non-Conformances which was a first for the auditors who had conducted 400+ certification audits.**
- **She earned a B.S. in Environmental Land Use from Metropolitan State College in Denver Colorado.**



TWPC Overview



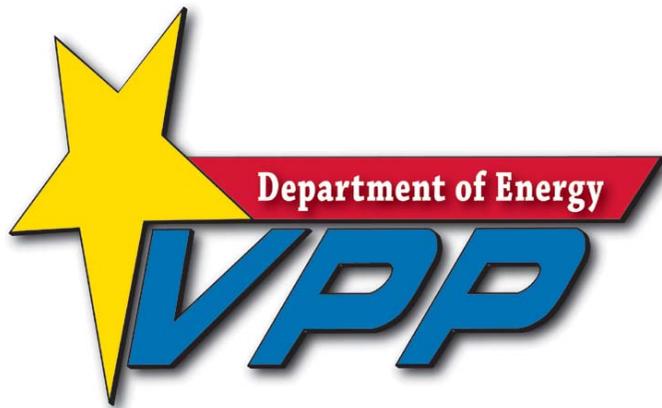
Decades of work at the Oak Ridge National Laboratory and other DOE activities generated Transuranic (TRU) waste that must be safely processed and disposed.

The TWPC processes Contact Handled and Remote Handled wastes for disposal at WIPP and NTS.





Integrated Safety Management





Value of Implementing an Environmental Management System

- **DOE requirement to implement Environmental Management System (DOE O 450.1A)**
- **DOE documents state that the term Safety includes Environmental Compliance and Protection**
- **Recognize benefits – going beyond compliance**
 - Potential to improve public health and environment
- **Improves credibility with regulators and local community**
- **Maintains confidence of the client**





Value of Implementing an Environmental Management System

- **Especially valuable for a facility conducting high hazard work for DOE**
 - Systematic process for
 - Identifying requirements and potential environmental impacts
 - Evaluating waste minimization and other pollution prevention opportunities
 - Conducting assessments and reviewing issues for collective significance





Value of Implementing an Environmental Management System

- **Contributes to continuous improvement and innovative ideas**
- **Increases worker awareness of environmental impacts and requirements**
- **Benefits from worker participation, everyone owns the system**





Why ISO 14001:2004 Certification?

- **ISO Certification is an international recognition of excellent performance**
 - ISO Certification means Environmental Excellence
- **Consistent with our mission**
 - Processing legacy high hazard waste from Oak Ridge and shipping for disposal at approved facility-Cleaning up Oak Ridge
 - Protecting public health and the environment
 - Do the right things for the environment and community
- **Consistent with organizational culture that values improvement and excellence**
 - We want to be “best in class”
- **Promotes innovation in the organization and builds ownership for project success**





TWPC Culture Promotes Safety and Environmental Management Systems

- Exemplary safety record
 - 8 yrs without lost time accident
 - Recently received VPP Star Status
- Safety Culture/Management Culture promotes communication, openness, worker involvement, participation, feedback, and ownership
- Management Systems promote excellence
 - Continual Improvement, Issues Mgmt, Lessons Learned
- Using Continuous Improvement tools
 - Safety Conscious Work Environment and Human Performance Improvement





Implementing the Environmental Management System and Achieving ISO Certification

- **The organizational culture was in place to support an Environmental Management System that focuses on continual improvement and minimizing environmental impact**
- **Introduce workers to the components of the Environmental Management System and how they would be involved**
- **Promote the value of ISO 14001:2004 Certification**





Preparing for ISO Certification

- **Implementing the EMS**
 - Requirements and Significant Aspects
 - Targets and Objectives
 - Measurable Progress and Continual Improvement
- **Preparing for ISO Certification**
 - Worker Awareness through training
 - Internal Audits and Gap Analysis
 - Worker Involvement
 - Management Support





Implementing the Environmental Management System and Achieving ISO Certification

- **Build Management Leadership equal to that shown for safety performance**
- **Dedicated EMS Representative to champion program and maintain certification focus**
- **Conduct Gap Analysis early in the process to determine weakness and opportunities for improvement**





Building Worker Ownership

- **Training sessions encourage participation and feedback**
- **Events (Earth Day and contests) to strengthen commitment, build ownership, and surface new ideas**
- **Environmental Newsletter to inform personnel on status of EMS implementation and provide training on EMS elements**
- **Opportunities for on-going input (suggestions)**
 - Follow up and regular feedback on suggestions





Building Worker Ownership

- **Worker involvement in determining goals and objectives**
- **Committees involve all site organizations to evaluate and recommend improvements**
- **Internal audits verify conformance and find opportunities for improvement**





RESULTS TWPC



*ISO 14001:2004 Certification
in only five months,
with no non-conformances!*



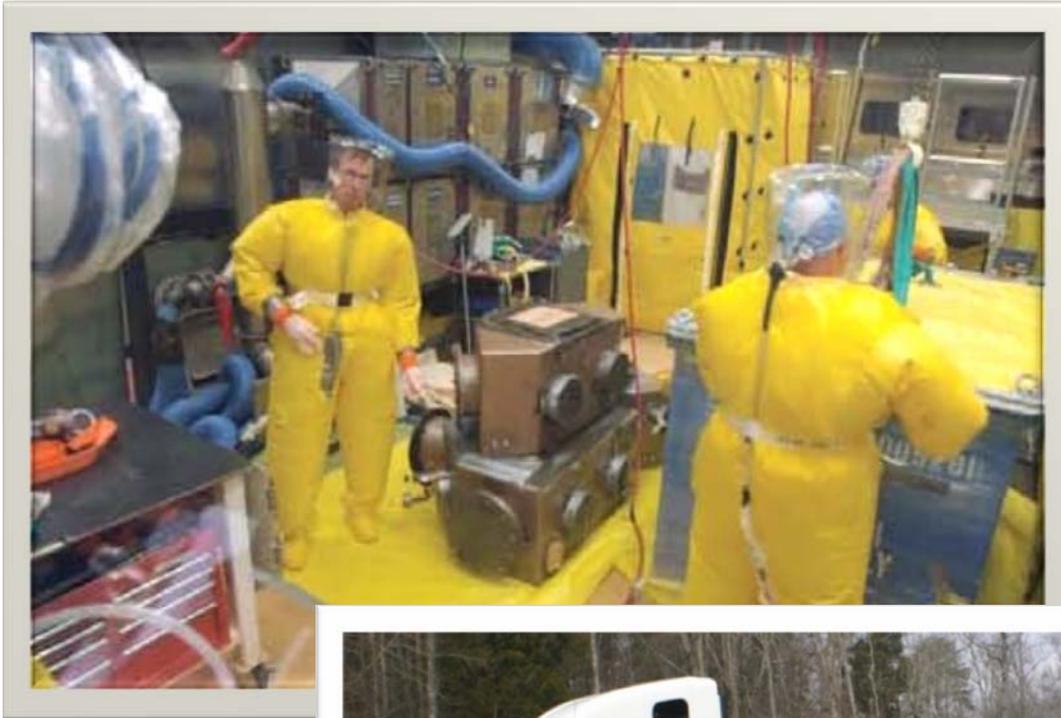


Changes Since ISO Certification!

- **The TWPC has almost tripled the number of employees on site (from ~100 to over 300)**
- **Many of these employees are new to the DOE world and the safety and compliance culture that go with working at a high risk nuclear facility**
- **The contract was awarded to a new contractor**



TWPC Activities





Changes!

- **A significant effort was placed on training-even before personnel were allowed on site**
- **This included a briefing by the Project Manager and Directors as to the site compliance philosophy and expectations**
- **Compliance is the expectation and continual improvement is the expectation**
- **In-depth training as to the site EMS was provided to all new employees**
- **Environmental Program personnel attend Plan of the Day and Pre and Post Job Briefings to ensure that not only are requirements identified but that personnel understand the why of the requirements and are encouraged to identify opportunities to improve environmental performance**





Results

- **Two annual audits have been conducted**
- **Both resulted in no Non-Conformances and No Opportunities for Improvement**
- **Several strengths were identified including the thorough review of impacts and targets and objectives**
- **The level of personnel involvement and**
- **The implementation of a public outreach program was also commended (Adopt A Highway)**





Lessons Learned

- **Change Management's Perspective**
 - Build awareness (new view of environmental performance)
 - Client expectations and requirements – environmental excellence is valued
 - Promotes innovation and improves overall environmental performance
 - Educate Senior Management on the benefits and provide frequent training and status updates
- **Ensure employees are involved in decisions**
 - Focus on employee involvement (ownership and values)
 - Establish EMS committees with representatives from all organizations on site





Lessons Learned

- **An Organization Culture that promotes safety and environmental performance equally supports a strong environmental program**
- **Critical elements**
 - That personnel including senior management understand that the Environmental Management System is part of the ISMS
 - Open communication, worker involvement and ownership, commitment to Continuous Improvement and a High Performing Organization
 - Communicate that ISO Certification as recognition of environmental excellence

