

# Oak Ridge National Laboratory Environmental Management System Aspects, Objectives, Targets Process



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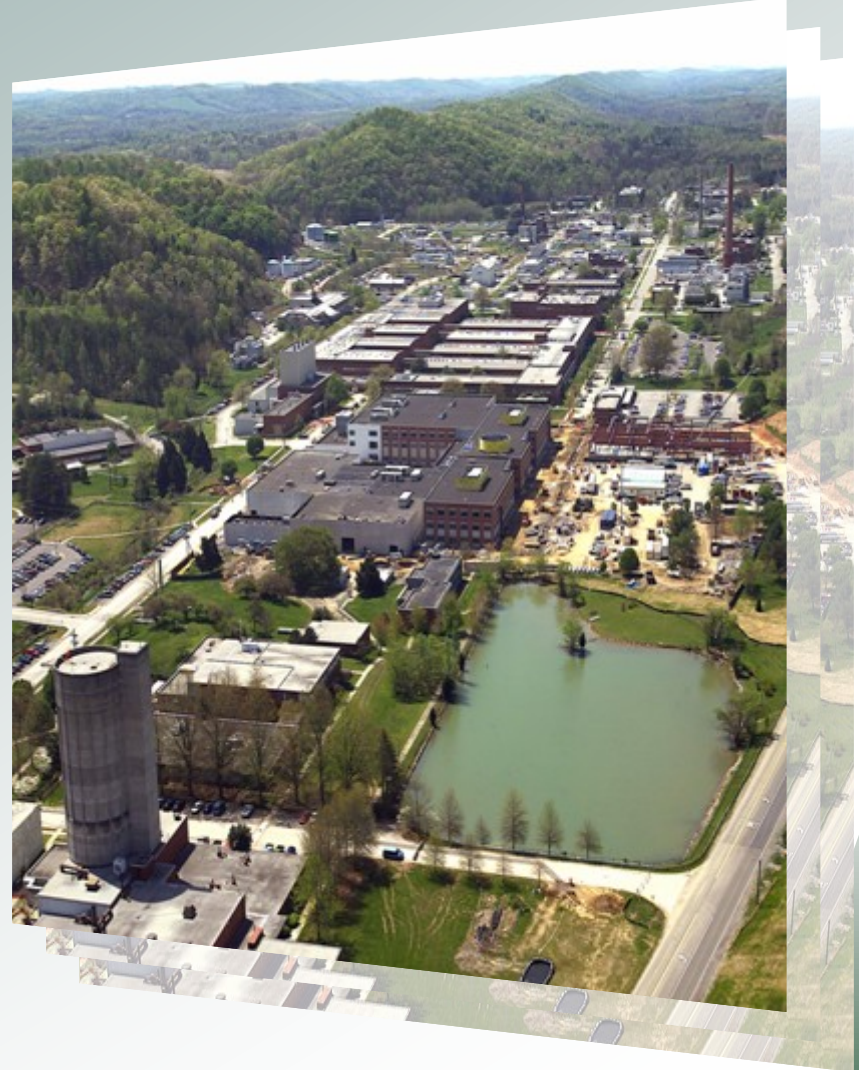
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**EFCOG ES&H Working Group  
Semi- Annual Meeting  
Environmental Subgroup**

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# Oak Ridge National Laboratory

- DOE's largest multiprogram science laboratory
- 4,000 employees & 3,000 research guests annually
- Established in 1943 as part of Manhattan Project
- Since 2000, UT-Battelle has been responsible for ongoing research and operations
- Multiple contractors at ORNL
  - Bechtel Jacobs Company; waste management and environmental remediation
  - Wackenhut; physical security
  - Isotec Systems; Building 3019
- Today's discussion focuses on UT-Battelle work scope only



# UT-Battelle Environmental Management System (EMS)

- **EMS scope includes R&D and support activities conducted by UT-Battelle**
- **EMS does not cover waste management and environmental cleanup conducted by Bechtel Jacobs Company (or other DOE Prime Contractors on site)**
- **UT-Battelle EMS registered to ISO 14001 in 2004**
- **ORNL accepted into EPA Performance Track in February 2007**

# UT-Battelle Facilities with Most Significant Environmental Profiles

- **Research Reactor**
  - Radioactive air emissions
  - Radioactive waste
- **Sewage Treatment Plant**
  - Regulated liquid discharges
- **Steam Plant**
  - Permitted air emissions

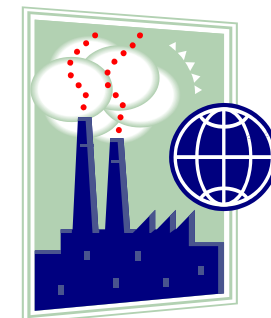


# Environmental Aspects - Process

- **List of environmental aspects developed by review of permits, reports, work control summaries, products, environmental requirements, etc.**
- **Aspects grouped into categories (chemicals, hazardous waste, regulated liquid discharges, water consumption, energy use, etc.)**
- **Significant aspects determined by environmental staff and line organizations**
- **Significance based on environmental risk with/without controls, regulatory risk, and business risk**
- **Internal procedure developed to formalize process**

# Significant Environmental Aspects

- Hazardous Waste
- Radioactive Waste
- PCB Waste
- Mixed Waste
- Permitted Air Emissions
- Regulated Liquid Discharges
- Storage/Use of Chemicals
- Storage/Use of Radioactive Materials



# EMS Objectives and Targets - Process

- **EMS objectives and targets established annually (on FY basis) as part of Laboratory strategic planning process**
- **EMS objectives and targets are entered into Lab electronic commitment system**
- **Significant aspects, applicable requirements, views of interested parties, etc. considered when developing objectives and targets**
- **Most EMS objectives and targets are “owned” by line organizations**

# FY08 EMS Objectives and Targets

- **Use of biodiesel fuel in vehicle fleet**
  - Reduce use of diesel fuel
- **Land and habitat conservation**
  - Treat/restore/maintain 682 acres
- **Hazardous waste reduction**
  - Eliminate generation of hazardous photo waste
- **Reduction in regulated air emissions from Steam Plant**
  - CO and NOx emission reductions from improved boiler water cycling
- **Reduce environmental impact from line org activities**
  - ~ 14 targets tailored to line org priorities (reduce chemical inventory, clean out work space, installation of closed loop equipment, etc.)

# Questions?

