Office of Legacy Management Significant Environmental Aspects

The mission of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) is to safely manage DOE's post-closure responsibilities and ensure the future protection of human health and the environment. We have evaluated all of our activities for their potential impact on the environment, and identified those aspects that could have a significant impact if they are not controlled. The information obtained is used for developing programs to prevent or mitigate potential impacts and to establish prioritized goals, objectives, and targets for continually improving performance.

Our significant environmental aspects fall into four categories:

- Waste generation and minimization
- Resource consumption, use, and storage
- Releases to the environment
- Land use (including cell construction and maintenance and structure erection or alteration)

Waste Generation and Minimization

We generate waste as a byproduct of our operations. These wastes include materials common to many industries. Solid, universal, electronic, hazardous, toxic, and radioactive waste streams are managed in compliance with applicable regulatory requirements.

LM manages all waste in accordance with the Pollution Prevention hierarchy. Our preference is to avoid generating waste whenever possible (i.e., source reduction). We procure only what is necessary to accomplish each job in order to minimize excess material management and disposition costs, and to conserve energy, water, and other natural resources that go in to making products. Our second choice is to reuse and recycle materials that we no longer need for the job. Reusable materials are transferred to other sites, projects, or activities that use the same types of products, or the materials are recycled at a local facility. If recycling is not an option and the product lends itself to energy recovery, a third option is to burn the material for energy use. Only as a last option does DOE determine that the material is a waste, and then treat and/or dispose of the material at a waste site.

We seek to minimize the amount of waste that we produce, especially hazardous and radioactive waste. We encourage waste prevention and the purchase of less hazardous and toxic materials, through sustainable acquisition. Pollution prevention opportunity assessments are conducted to identify and implement activities that reduce waste, and we have a comprehensive recycling program. We aim to eliminate hazardous materials spills, and our Radioactive Waste Management Program ensures that we limit, control, minimize, and measure the production of radioactive materials in solid waste, gaseous emissions, and liquid discharges.

Resource Consumption, Use, and Storage

We purchase and store a variety of petroleum, chemical, and radioactive materials for use at LM sites. These materials include diesel fuel, gasoline, acids and other chemicals, herbicides, pesticides, and radioactive sources. In addition, we purchase utilities such as water, electricity, and natural gas, and reduce purchases by using renewable energy sources.

A policy is in effect that requires us to purchase or lease E-85–capable, light-duty vehicles from the General Services Administration. An additional policy requires that we lease or purchase the smallest-sized vehicles, and control the smallest-sized fleet necessary to accomplish LM's mission.

All drivers are encouraged to fuel E-85–capable vehicles with E-85 fuel whenever possible and to carpool if they are able. Our drivers are provided with instructions and resources for locating stations that carry alternate fuels. Lowering our use of and dependency on conventional fuel, to the maximum extent possible, is an action that LM has committed to fulfill.

We minimize our storage and use of materials that may pose a risk to the environment, including petroleum, chemicals, and radioactive materials. Our Chemical Control Program is a best management practice for minimizing our use of chemicals that are harmful to plant systems, structures, components, and personnel. The program also mandates that the Environmental Compliance department screen and approve chemicals for specific uses ahead of time, to minimize the use of hazardous substances, chemical exposures to personnel, generation of hazardous and mixed waste, and fire hazards. In addition, our Waste Minimization/Pollution Prevention Plan seeks to replace hazardous materials with nonhazardous substitutes, such as using latex paint instead of solvent-based paint.

Reducing the purchase of potable water and energy sources is accomplished by employing the goals outlined in Executive Order (EO) 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," and EO 13514, "Federal Leadership in Environmental, Energy, and Economic Performance." We have operations and maintenance plans in place that address resource-consuming items such as electronic settings, HVAC (heating, ventilation, and air conditioning) setbacks, temperature controls, and electronic-power management techniques to minimize the use of resources.

Releases to the Environment

In accordance with federal and state regulations, operations at several sites permit the release of wastewater and storm water into receiving streams or groundwater. The National Pollutant Discharge Elimination System regulates discharges to streams. Wastewater is treated and routinely tested for metals, chemicals, and radionuclides, before it is discharged to streams. Discharges to groundwater are also subject to site-specific agreements between LM and site-specific regulatory agencies.

Radioactive materials, including uranium mill tailings that are stored in onsite disposal cells, are carefully monitored and maintained to prevent releases to the environment.

Projects and activities are evaluated for their potential to affect air quality and/or emit greenhouse (GHG) gases, and determinations are made whether permitting and monitoring will be required. We track Scope 1, 2, and 3 GHG emissions, and implement mitigation measures where applicable.

Land Use

Reducing our "footprint" on the natural landscape, whenever possible, is something that we seek. Although maintenance or monitoring projects such as road repairs and well installations have the potential to cause some harm to the environment, (e.g., erosion of soil, introduction of noxious weeds, disturbance to cultural resources), we take measures to prevent such consequences. Potential environmental impacts are identified during the planning process of any project, and best management practices or other mitigations are incorporated into the plan before surface-disturbing work begins. We reuse portions of sites to support renewable energy initiatives and projects.

If you have comments or questions related to our significant environmental aspects, contact the LM Environmental Management System Coordinator, Tracy Ribeiro, at (303) 410-4817, tracy.ribeiro@lm.doe.gov.