DOE Office of Legacy Management Current Mission Goal 1

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U.S. Department of Energy (DOE)
Office of Legacy Management (LM)

Waste Management 2014 • March 3, 2014



LM Goal 1 - Protect Human Health and the Environment

- Groundwater Remedy Updates
- Formerly Utilized Sites Remedial Action Program Strategic Plan
- Enhanced Cover Assessment Project
- Environmental Justice



Groundwater Remedy Updates

- Fernald active pump/treat/discharge uranium remedy is not meeting the optimistic end of the date range for completion and thus we are pursuing design changes to increase extraction efficiencies
- Rocky Flats active and passive treatment systems continue to be optimized, managing to very low site specific uranium standard
- Tuba City active pump/treat for uranium removal is severely limited due to low water extraction in contaminated aquifer
- Mound rebound effects in solvent plume continue to require treatment, studying whether to try an alternative passive treatment rather than pump/treat
- Pinellas LM has conducted supplemental solvent source removal, in-situ biological treatment, now focused on plume stability monitoring
- Weldon Spring Monitored Natural Attenuation remedy still protective, studying monitoring network locations and reevaluating
- location-specific contaminant concentration criteria as success



Formerly Utilized Sites Remedial Action Program (FUSRAP) Strategic Plan

- LM currently manages 30 FUSRAP sites remediated either by DOE or the U.S. Army Corps of Engineers (USACE)
- Current sites are mostly "records only" sites where the DOE LM mission is to maintain and make available records of the site activities
- 23 additional FUSRAP sites are still to be remediated and most of those sites are more complex and will transition to LM's long term surveillance with requirements beyond "records only" such as institutional controls, groundwater monitoring or in some cases ongoing remedial actions
- Due to the increased complexity of the FUSRAP sites that have yet to transfer to LM, a review of the program is underway to develop a strategy for resourcing the needs of the future sites
- This review will examine the risk management process for ineligible FUSRAP sites, the roles and responsibilities of DOE and USACE, and the scope, schedule, and cost changes needed to resource LM's mission



Enhanced Cover Assessment Project (ECAP)

- Most Uranium Mill Tailings Radiation Control Act (UMTRCA) disposal cells are in arid climates in the western US since that is where the uranium was mined and milled
- Due to low precipitation and arid soil conditions, most UMTRCA disposal cells were designed and built with soil radon barriers covered with rock
- Advantages of top rock layer is good water erosion protection of radon barrier. Disadvantage is rock covers over time (20+ years) can create habitat for deep rooted plants which may penetrate tailings
- Advantages of selected vegetative covers include removal of scarce precipitation (evapotranspiration), thus reducing the possibility of infiltration. Disadvantage of vegetative covers include costs of establishing sustainable cover
- LM decided to study these two types of covers, understand the natural succession processes, and try to measure the relative beneficial and detrimental impacts
- Two test cells were constructed in Grand Junction, CO for side by side comparison of water balance, vegetation, erosion
- Enhancing and thus speeding up transition time will be tested in next few years
- Key is to work with natural processes





Environmental Justice

- EJ is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
- We manage a diverse set of activities to ensure that EJ is embraced throughout the Department.
 - We will issue our updated EJ Strategy in March of 2014
 - We will implement our second Five-Year Plan in 2014
 - We also offer EJ Training to employees and contractors across DOE and we support a number of community capacity building, education and public participation projects to increase the awareness and ability to support EJ programs across the country.
 - National Environmental Justice Conference and Training Program,
 Washington, DC held annually to bring together participants to dialogue on
 achieving equality of environmental protection and a free exchange of lessons
 learned on the concepts for EJ (March 26-28, 2014, www.thenejc.org)
 - http://energy.gov/lm/services/environmental-justice

