



# Program Update

October–December 2009

Welcome to the October–December 2009 issue of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) Program Update. This publication is designed to provide a status of activities within LM. Please direct all comments and inquiries to [LM@hq.doe.gov](mailto:LM@hq.doe.gov).

## Goal 1

### Rocky Flats Project Takes Advantage of Required Maintenance to Improve Performance

The first goal of the U.S. Department of Energy Office of Legacy Management (LM) is to protect human health and the environment through effective and efficient long-term surveillance and maintenance at LM sites. At LM's Rocky Flats Site, a key component in meeting that goal is ensuring that the four groundwater treatment systems continue to remove groundwater contamination before it can impact the site's surface waters. Effective and efficient operation also requires that LM continually evaluate the systems and look for cost-effective ways to improve their performance.

Two of the East Trenches, T-3 and T-4, were used to dispose of contaminated sanitary sewage sludge at Rocky Flats from 1964 to 1967. These trenches were the primary source for a volatile organic compound (VOC)–contaminated groundwater plume and were remediated in 1996.

The East Trenches Plume Treatment System (ETPTS) was installed in 1999 to intercept and treat the contaminated groundwater emanating from the East Trenches area before the plume reaches South Walnut Creek. The ETPTS consists of a 1,200-foot-long groundwater intercept trench and two treatment cells.

Contaminated groundwater enters the intercept trench and is gravity-fed into the treatment cells, which are filled with zero-valent iron (ZVI) that causes a chemical reaction that breaks up the VOC compounds into harmless constituents. The treated water is discharged on the downgradient side of the treatment cells and eventually enters South Walnut Creek.

Over time, mineralization causes the ZVI treatment media to become clogged and solidify, so it has had



The East Trenches Plume Treatment System prior to the media replacement project.

### Legacy Management Goals

**Goal 1:** Protect human health and the environment through effective and efficient long-term surveillance and maintenance.

**Goal 2:** Preserve, protect, and make accessible legacy records and information.

**Goal 3:** Support an effective and efficient work force structured to accomplish Departmental missions and assure continuity of contractor worker pension and medical benefits.

**Goal 4:** Manage legacy land and assets, emphasizing protective real and personal property reuse and disposition.

**Goal 5:** Improve program effectiveness through sound management.

See page 14 for a map of LM sites.

See page 15 for a more detailed version of LM's goals.

Continued on page 2



Continued from page 1

## Rocky Flats Project Takes Advantage of Required Maintenance to Improve Performance



*During media removal you can see the mineralized ZVI that has become crusted and turned orange, while the black ZVI in the center of the cell shows little sign of contact with water flow.*

to be replaced. The frequency of replacement varies, but the ETPTS has been replaced roughly every four years since the system was put in operation. This mineralization may also cause the plumbing from the treatment cells to plug up, potentially requiring excavation and replacement.

During the ETPTS media replacement project, site personnel discovered that the water had been bypassing a significant portion of the media, causing some portions of the media to mineralize and block the flow of water to other portions. Because the water would then flow around those blocked portions rather than flowing through the media evenly, some of the media had little contact with the contaminated water and the effectiveness of the treatment was reduced. In addition, mineralized media can adhere to the cell walls, requiring a jack hammer to remove it.

In order to resolve these performance issues, new designs were incorporated into several elements of the treatment system during media replacement.

Originally, the collected water flowed from the intercept trench into the top of the first cell, flowed down through the media, and was then piped to the top of the second cell, where it again flowed down through the media and out the bottom of the cell to the discharge gallery. This

“series, down-flow” configuration promoted solidification of the media at the top of each cell, which forced the water to flow downward along the sides of the cell, bypassing media in the center of the cell.

To reduce the potential for flow to shortcut through or around the media, the predominant flow configuration is now “up-flow,” with water entering at the base of each cell and exiting at the top. Furthermore, because when operated in series, the media in the first cell becomes clogged much more quickly than that in the second, the system is now operated primarily in a “parallel” flow configuration: the influent water now flows into the bottom of both cells in parallel, rising through the media as the cell fills and exits out the top of the cells. Additionally, the media configuration was redesigned so that the lowermost several feet of media in each cell consists of thin, alternating layers of gravel and ZVI. This is intended to more gradually remove the dissolved constituents (predominantly calcium, iron, and carbonate) that cause clogging and promote a more even flow through the pure ZVI media above the layered media.

Better flow will increase the contact between the contaminated water and the media, resulting in improved treatment performance and increasing the

Continued on page 6



*New ZVI media is placed into one of the treatment cells. The new liner in the cell is also visible.*



## Goal 4

### Excess Parcel Sale in New Brunswick, New Jersey, Nears Completion

The Department of Energy (DOE) Office of Legacy Management (LM) is the land-holding agency for the Formerly Utilized Sites Remedial Action Program (FUSRAP) sites. Following the remedial actions on a given FUSRAP site, the U.S. Army Corps of Engineers (USACE) returns the site to LM for management and in some cases, disposition.

DOE and its predecessor agencies operated a chemistry laboratory at the New Brunswick, New Jersey, site from 1948 to 1977. Much of the work performed at the site involved analyzing radioactive materials. Between 1978 and 1996, DOE removed all the structures associated with the site, both aboveground and belowground. DOE then employed independent third parties to verify that there was no remaining soil or groundwater contamination that exceeded standards for cleanup. All contamination was removed to prescribed limits except arsenic, which remains in soil on the northeast portion of the site and is covered by clean, backfill soil. Arsenic concentrations are low—less than three times background levels. Part of the institutional controls put in place included the site being zoned for industrial use.

After the remedial actions were completed, the New Jersey cleanup standards were tightened and additional work was required prior to the property meeting federal disposal requirements. This parcel of 5.61 acres was identified to be excess to the needs of LM and evaluations were made to determine if it could be transferred or dispositioned. LM filed a deed notice restricting the use of the property with Middlesex County, New Jersey, on September 20, 2007. DOE imposed an excavation restriction on the property and will confirm every two years that the controls remain effective. The deed notice and the provisions for long-term care are implemented in accordance with State of New Jersey regulations found at New Jersey Administrative Code, Section 7:26E, Technical Requirements For Site Remediation, Subchapter 8, "Engineering and Institutional Controls,"

<http://www.state.nj.us/dep/srp/regis/techrule/techrule.pdf>.



Continued on page 4



## Goal 1

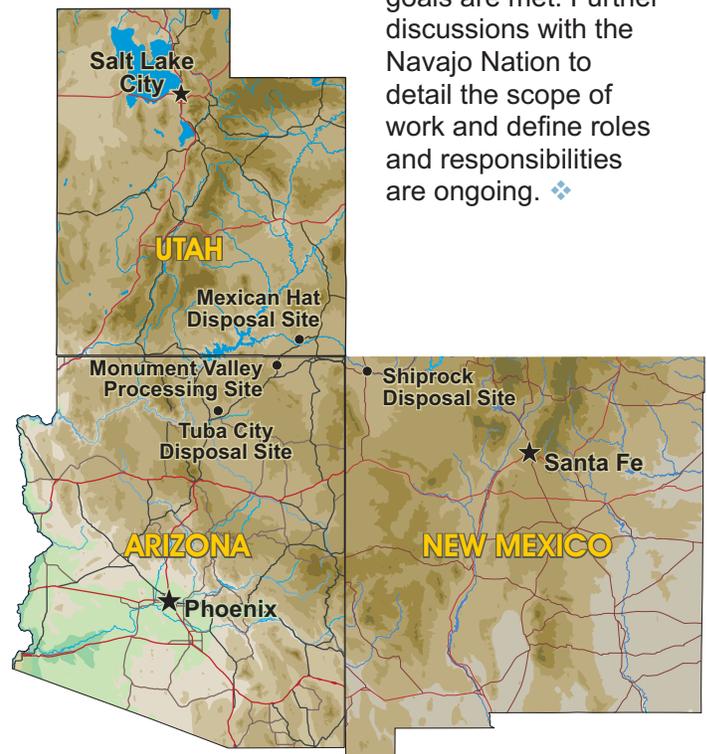
### Navajo Uranium Contamination Stakeholder Workshop

Ray Plienness, Director, Office of Site Operations, and Tracy Plessinger, Physical Scientist, attended the Navajo Uranium Contamination Stakeholder Workshop held in Gallup, New Mexico, November 3 and 4, 2009. The workshop involved representatives from several federal agencies, including EPA, Bureau of Indian Affairs (BIA), Indian Health Services (IHS), Nuclear Regulatory Commission, Centers for Disease Control, and several state agencies. Topics of the workshop included an update on the five-year plan requested by the Committee on Oversight and Government Reform, led by Representative Henry A. Waxman, and discussions regarding contaminated structures; the Tuba City Open Dump; contaminated water sources; and other related topics.

Ray Plienness provided status updates on the four LM sites located on the Navajo Nation: Tuba City and Monument Valley, Arizona; Shiprock, New Mexico; and Mexican Hat, Utah. Regarding commitments made in the five-year plan, DOE continues to monitor and maintain three cells, fund the Navajo Nation for their participation in site activities, provide technical support to IHS and BIA, and collaborate with the Navajo Nation on issues regarding the Uranium Mill Tailings Radiation Control Act (UMTRCA) Title II site at Church Rock, New Mexico. As part of the technical coordination, DOE is funding placement of eight monitor wells north and west of the Tuba City disposal cell to address technical concerns of the Nation regarding potential impacts from the site, a Uranium Mill Tailings Remedial Action site, with the open dump.

The status of the Highway 160 Site cleanup was discussed since Congress authorized funding in fiscal year 2009 for DOE to remediate the site. DOE has completed a modification to an existing cooperative agreement that provides funds for the Navajo Nation to perform design and remedial action of the site. DOE will review the work plans and verify that cleanup

goals are met. Further discussions with the Navajo Nation to detail the scope of work and define roles and responsibilities are ongoing. ❖



Continued from page 3

### Excess Parcel Sale in New Brunswick, New Jersey, Nears Completion

The disposal documentation was completed and accepted by the General Services Administration (GSA) and the transfer was planned to occur in October 2007. The parcel was auctioned for sale on the GSA website in October 2007 with a high bid of \$1.125 million. After a year of discussions with the New Jersey Department of Environmental Protection (NJDEP), the NJDEP issued a No Further Action

memo on October 14, 2008. This was not the final hurdle to allow the disposal to succeed. The buyer subsequently identified concerns with a storm water pipe and it then took GSA and the buyer one year to resolve title issues and liability concerns prior to final funds being sent to GSA on October 23, 2009. GSA is now preparing the final deed for conveyance to complete the sale. ❖



### Goal 3

## Nuclear Weapons Workers Honored at the Weldon Spring, Missouri, Site

From the inception of the Manhattan Project until the present day, over 700,000 Americans have worked in all aspects of our nation's nuclear complex on more than 300 individual sites. To honor this legacy, the United States Senate voted unanimously in May 2009 to establish October 30 as a National Day of Remembrance for nuclear weapons workers. This day commemorates the dedication of our nation's former nuclear weapons workers, as well as uranium miners, millers, and haulers.

In October 2009, Deputy Secretary Daniel Poneman called for DOE sites to recognize the day with their own events. Shortly thereafter, a St. Louis uranium worker's advocate, Denise Brock, contacted the Department of Energy (DOE) Office of Legacy Management (LM) regarding the possibility of holding an event at the LM Weldon Spring Site, about 35 miles west of St. Louis, Missouri. The site was once the home of the Weldon Spring Uranium Feed Materials Plant which was operated from 1957 to 1966 by Mallinckrodt Chemical Works under the U.S. Atomic Energy Commission. Environmental remediation of the site began in 1986 and an engineered disposal facility was completed in 2001. The site is part of LM's long-term surveillance and maintenance program. Because the site is currently open to the public and is within close proximity of thousands of former nuclear weapons workers, it made an ideal venue for an event to honor the newly established National Day of Remembrance.



Jane Powell, Weldon Spring Site Manager for DOE-LM, addresses the crowd.

organizing the event in approximately 3 weeks. The St. Louis area experienced the wettest October on record, and rain just prior to the event required last-minute logistical changes. Despite the poor weather conditions, approximately 400 individuals attended the event at the site including former nuclear weapons workers, their families, the local news media, and representatives of various federal agencies including LM; the DOE Office of Health, Safety and Security; the Department of Labor; and the National Institute of Occupational Safety and Health. Additionally, representatives from many offices of state and local elected officials were in attendance.

Former workers were presented with commemorative pins in observance of their vital efforts in the nuclear weapons industry and of the first National Day of Remembrance courtesy of the DOE Office of Health, Safety and Security. One former uranium worker, Howard Shumate of Spanish Lake, said it was good to be recognized for the work that he and his co-workers did so many years ago. "I think it's great. It's something we should be proud of."

Honorary events were also held at many other locations throughout the country such as Aiken, South Carolina; Oak Ridge, Tennessee; Albuquerque, New Mexico; and Las Vegas, Nevada. ❖



Volunteer Boy Scouts pass out commemorative pins to former nuclear weapons workers.

Working together, LM and Brock sent out invitations and handled the details,



Denise Brock is interviewed by local news media inside the Weldon Spring Site Interpretive Center.



Continued from page 2

## Rocky Flats Project Takes Advantage of Required Maintenance to Improve Performance

useful life of the media. The total thickness of the media was also increased. This media design and up-flow operation also eliminates the time-consuming maintenance requirement to rake the top of the media on a weekly basis.

The redesign also included replacing the existing plumbing adjacent to and between the treatment cells. Originally the pipes and some valves were buried underground, which requires a relatively large excavation and trench boxes in order to repair pipes or reconfigure valves. The new design incorporated an additional vault to act as the central valve box and pipe liners that will allow the liners to be easily replaced from within the vault when the pipes start to clog with mineralization.

LM also took advantage of new technology to improve monitoring capabilities by replacing the existing flow meters with more accurate equipment. The new meters will allow LM to more closely track system operation and treatment volume, and to better evaluate the effects of the new parallel cell configuration. A user-friendly system operations “dashboard” that works with the existing telemetry was created to improve site personnel’s ability to remotely monitor data such as flows, water levels, and line pressures and evaluate system operation and maintenance needs.

Finally, a liner was installed in each cell to prevent the media from adhering to the cell walls, easing future media replacement efforts.

Rocky Flats also was able to recycle the old ZVI, which combined with the reduced amount of new media needed and the anticipated improvement in treatment performance, make the ETPTS media replacement and system upgrade project an excellent example of LM’s first goal: to protect human health and the environment through effective and efficient long-term surveillance and maintenance. ❖



*A contractor installs the plumbing that distributes the water to be treated in the cell.*



*A feature of the new vault installed as part of the system improvements is that the plumbing configuration can be easily changed and new pipe liners installed.*



*The newly installed vault is visible between the cells at the completion of the media replacement project.*



## Goal 2

### Legacy Management Business Center Opens

The Legacy Management Business Center (LMBC) opened on December 22, 2009. The 59,000-square-foot facility, located at 99 Research Park Road within the West Virginia University Research Park in Morgantown, West Virginia, has capacity for 27 federal staff and 68 contractor staff, and has space for an additional 10 contractors to be stationed in the records warehouse area. The facility also contains an area to store specially designated records, a loading dock, records receipt and processing areas, an IT server area, the IT Help Desk, and a fitness center.

The facility is expected to attain two Leadership in Energy and Environmental Design (LEED) Gold certifications—one for Core & Shell and one for Commercial Interiors—from the U.S. Green Building Council. LEED for Commercial Interiors certification is a benchmark for the tenant improvement market that gives the power to make sustainable choices to tenants and designers. LEED for Core & Shell certification aids designers, builders, developers, and new building owners in implementing sustainable design for new core and shell construction. The facility and operations will maintain compliance with the standards and requirements of these certifications. Notable

environmentally friendly features of the building include a windowed clerestory providing lighting and views to internal offices, use of low-emitting materials, controllability of lighting systems, enhanced indoor air quality management, optimization of energy performance, use of regional materials, waterless and low-flow toilets, and sustainable landscape design.

The facility is also a National Archives and Records Administration (NARA)-certified federal records storage facility with a 150,000 cubic foot storage capacity, including a controlled environment area for special media storage. The records warehouse floor space is approximately 31,000 square feet and the controlled environment area is 1,128 square feet. Both areas contain rows of 15-foot tall records shelves.

The documents to be stored, managed, and processed at the facility are inactive, temporary DOE records from the Cold War nuclear sites. Records are retrieved in response to various requests for information. The records currently stored at several NARA federal records centers are to be transferred to the LMBC for permanent storage as part of the facility mission. ❖



### Goal 1

## Environmental Justice Program Participates in 2009 Brownfields Conference

The Environmental Justice Program participated in the 2009 Brownfields conference held in New Orleans, Louisiana, November 16 through 18, 2009. The Department of Energy (DOE) Office of Legacy Management was an exhibitor at the conference, and the Environmental Justice Program Manager served on a panel, "Federal and Local Partnerships—Resources for Local Governments," for mayors and other local government officials. The forum provided an overview of federal resources available to support the efforts of mayors and other local officials to promote sustainable communities and implement programs that will address the myriad quality of life needs in their cities and town. Panelists shared valuable information with the participants and engaged in meaningful dialogue that made for a highly interactive and productive forum. The session format prompted the participants to share both success stories as well as barriers to their efforts and suggestions for partnering with federal agencies to most effectively address those barriers.

The DOE presentation detailed a number of programs designed to support communities and state and local governments, including building community capacity

through technology, effectively using sustainability tools, and technical assistance through the Dr. Samuel P. Massie Chairs of Excellence program, an effort that strategically dispatches a cadre of researchers, scholars, deans from schools of engineering, and instructors from nine historically black colleges and universities (HBCUs) to assist communities that need technical expertise to address infrastructure needs. In addition, the presentation covered how DOE's Energy Efficiency and Renewable Energy Office administers the Energy Efficiency and Conservation Block Grant Program, a particularly valuable resource providing funding and support directly to states, cities, counties, and tribes.

The national Brownfields Conference is the largest, most comprehensive conference focused on cleanup and redevelopment of abandoned, underutilized, and potentially contaminated properties in the nation. Local, state, and federal officials; economic development officials and community development organizations; environmental and civil engineers; and academic institutions and students attended the conference. ❖

### Goal 1

## Third Annual Environmental Justice Health Braintrust National Conference on Health Disparities

On December 2 through 5, 2009, the Congressional Black Caucus Health Braintrust held its third annual National Conference on Health Disparities in Atlanta, Georgia. Congresswoman Donna Christensen chaired the Conference. Other Congressional participants included House Majority Whip, Chair of the Congressional Hispanic Caucus, Chair of the Congressional Black Caucus, and the Chair of the Congressional Asia Pacific American Caucus.

This year's conference transitioned the national dialogue on health disparities from recognition of conditions and causes to recommendations and directions for public policy and legislative action. Other topics addressed were the social determinants of health disparities such as poverty, education, environmental and climate change; the impact of technology on reducing costs and improving outcomes; the role of community health centers in health care delivery; and the benefits of public/private partnerships in addressing health care issues. The Office of Legacy Management as well as members of the Federal Interagency Working Group on Environmental Justice participated in the conference. ❖



## Goal 1

### Environmental Protection Agency and DOE Office of Legacy Management Superfund Job Training Initiative Hires 19 Disadvantaged Individuals

The Superfund Job Training Initiative (SJTI) is a job-training partnership between the U.S. Environmental Protection Agency and the Department of Energy (DOE) Office of Legacy Management. This tuition-free training program recruits unemployed individuals from underserved communities. Through this program, 19 disadvantaged and unemployed individuals from economically depressed areas near DOE Savannah River Site (SRS) have been trained in hazardous waste management and given full-time employment at SRS.

During the initial class, 90 individuals competed for the 19 available positions. The successful applicants completed a six-week training program held at Aiken Technical College in Aiken, South Carolina. The program included classes on résumé writing, life skills, environmental justice, mathematics, computer skills, first aid, CPR, and hazardous-waste-worker training. Applicants also underwent pre-employment aptitude examinations to gauge their leadership potential and overall employee temperament.

The SJTI was developed to provide disadvantaged adults with the necessary job skills to work at a Superfund site. These sites are designated for substantial cleanup and are typically abandoned hazardous waste facilities in need of specialized cleanup. Program participants will go to work at SRS as production operators or material handlers on American Recovery and Reinvestment Act of 2009, known as the Recovery Act, projects. ❖



*Prospective trainees at the SJTI class were informed about the requirements and expectations of the program if chosen to participate.*



*Successful applicants received instruction in areas such as hazardous waste operations, emergency response, and CPR.*





## Goal 1

### HBCUs Federal Opportunities Institute

With the intent to increase environmental justice community capacity for participation in Departmental decision-making, the Environmental Justice (EJ) Program developed a new activity for Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs) called the HBCUs Federal Opportunities Institute (Institute). The Institute is designed to give HBCUs and MSIs greater familiarity with Federal programs, and acquaint Federal programs with HBCU and MSI capabilities, all for the purpose of providing HBCUs and MSIs with additional tools to support community participation in DOE decision-making.

There were two Institutes conducted from September through December. The first was at Tougaloo College in Tougaloo, Mississippi. The United States Department of Agriculture (USDA), the Mississippi State Office of USDA, the Department of Homeland Security, and the U.S. Army Corps of Engineers joined DOE to discuss how to collaborate with Tougaloo and other participating institutions to increase their Federal activities and provide greater assistance to community groups. A number of potential collaborations resulted from this Institute. For instance, the USDA State Office has facilitated additional meetings with Tougaloo to better explain USDA programs and how HBCUs and MSIs can access those programs. Both USDA and DOE agreed to work with the City of Tougaloo to establish a community technology center that will provide disadvantaged citizens with access to computers and high-speed internet with the intent to, among other things, increase their ability to participate in DOE and other federal processes. All participants were pleased with the new relationships and commitments made at the Institute in Tougaloo.

The second Institute was conducted at Tuskegee University in Tuskegee, Alabama. Many HBCUs and MSIs are suffering the triple threats of dwindling finances, decreased enrollments, and declining host communities. Many host communities lack amenities sought by students, parents, and faculty members. As the host community suffers, so does the institution. Therefore, the topic of discussion in Tuskegee was how the institution and the host community can collaborate to stimulate the local economy and support the school's recruiting and retention efforts. One possible answer is to revitalize the host community.

The Revitalize the City of Tuskegee Forum attracted approximately 100 citizens, city, county, regional, state, federal, university, alumni, philanthropic, faith-based, and bank-financing participants. Tuskegee's Mayor Neal and Tuskegee University's President Payton opened the Forum with a unified message that the time is now ripe to revitalize the City of Tuskegee, Alabama. They agreed that a revitalized Tuskegee would improve the local income and increase the University's ability to recruit and retain high-quality students and faculty members. Mayor Neal and other locally based participants gave a vision for a revitalized Tuskegee. The vision focused on education, health care, public safety, and green jobs. Following the local vision presentations, various representatives from state and federal government, the private sector, and philanthropic communities gave their reactions to the local vision along with potential assistance from their agencies. ❖

## Goal 1

### Environmental Justice Training for DOE and Contractor Environmental Attorneys

On October 21, 2009, the Department of Energy (DOE) Office of Legacy Management conducted an environmental justice training session for DOE and contractor environmental attorneys. This session was part of a two day Environmental Attorneys' Training Workshop and covered areas including the history of environmental justice, DOE Public Participation and Community Relations policy, how to work with tribes, the DOE *Environmental Justice Strategy*, and the *Environmental Justice Five-Year Implementation Plan*.

The training gave participants a greater awareness of environmental justice and strategies for incorporating environmental justice into DOE policies, decisions, and activities. LM staff participated in both days of the Environmental Attorneys' Training Workshop. ❖



### Goal 4

## Fernald Preserve Update

The end of 2009 marks the first full calendar year of operation. It was a busy and exciting year at the Fernald Preserve. The Visitors Center attracted its 10,000th visitor during the year, and a wide variety of groups and organizations viewed our exhibits and utilized our meeting room. Recent visitors and events included the Colerain High School Honors biology class, the Cincinnati Astronomical Society's viewing of the Geminid meteor showers, and several scouting activities. Consistent with our education mission, the Center had increased use by elementary, secondary, and college classes, and over 1,500 students visited the site.

The Fernald Preserve participated in the National Audubon Society's Christmas Bird Count on December 20. The annual count provides data to help assess the health of bird populations and to help guide conservation efforts. This year nearly 1,100 birds representing 47 species were counted at the Fernald Preserve.

Three new geocaches have been hidden at the Fernald Preserve. Geocaching is a high-tech treasure hunting game played with Global Positioning System (GPS) devices. The basic idea is to use a GPS to locate hidden containers called geocaches. A typical cache is a small, waterproof container containing a logbook. Those finding the cache record their names and a message in the logbook. Fernald's three caches are located along Hickory and Shingle Oak trails and near the Swan Lake overlook. More information on geocaching can be found at [www.geocaching.com](http://www.geocaching.com).

During December the Fernald Preserve staff completed the On-Site Disposal Facility and general site inspections. The inspections are conducted quarterly to assess the effectiveness of our ecological restoration efforts as well as to identify eroded areas needing treatment, signs of unwanted burrowing animals, and invasive plant growth. ❖

## SAVE THESE DATES

### Using Innovative and Agile IT Solutions to Enable DOE's Evolving Missions

**March 1 through 5, 2010  
San Antonio, Texas**

The 2010 Information Management Conference (IMC) is being held at the JW Marriott San Antonio Hill Country Resort & Spa in San Antonio, Texas. This year's IMC will address management, acquisition, implementation, operation, and maintenance of information technology (IT) in support of the mission, goals, and objectives of the Department of Energy (DOE) and its programmatic offices.

The conference will include innovative town hall presentations, training and professional development sessions, and a unique opportunity to bring together the DOE community to share ideas, compare notes, and make plans for the future. ❖

### The State of Environmental Justice in America 2010 Conference

**May 12 through 14, 2010**

Howard University School of Law  
2900 Van Ness Street, NW  
Washington, DC

Brought to you by:

- Howard University School of Law
- National Small Town Alliance
- U.S. Department of Agriculture
- U.S. Department of Energy
- U.S. Environmental Protection Agency

For additional information contact Melinda Downing, Department of Energy Environmental Justice Program Manager, at [melinda.downing@hq.doe.gov](mailto:melinda.downing@hq.doe.gov). ❖



## Goal 1

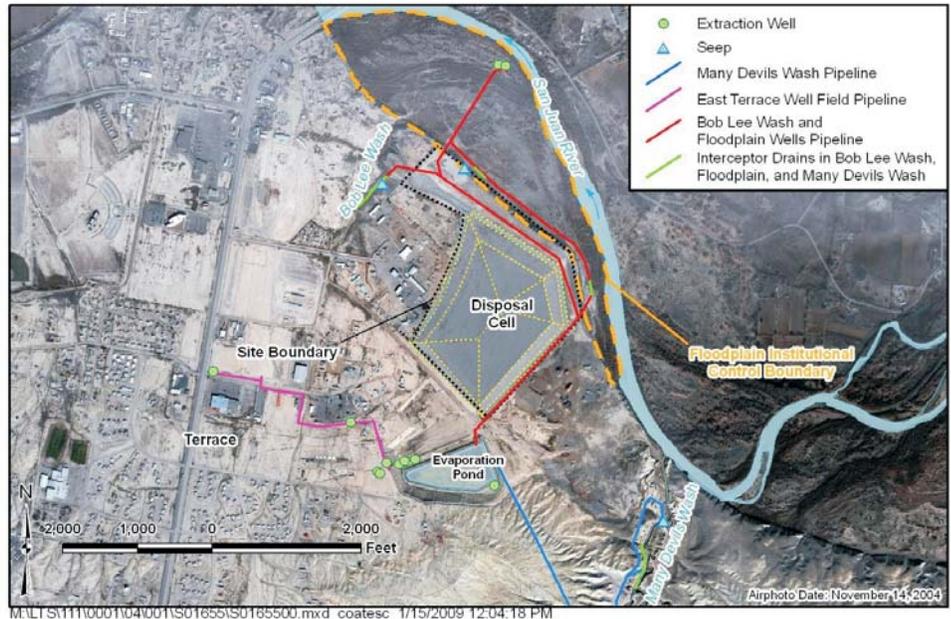
### Legacy Management and the Navajo Nation Host Public Meeting

Legacy Management (LM) partnered with the Navajo Nation Abandoned Mine Lands (AML) Reclamation Uranium Mill Tailings Remedial Action (UMTRA) department to host a public meeting in Shiprock, New Mexico, on October 13, 2009, to present the current status of the Shiprock uranium mill tailings disposal site and to give the Shiprock community an opportunity to ask questions. This was the first public meeting held at Shiprock in several years and it was generally well received with a request to offer more frequent updates to keep the community better informed.

The Shiprock site is the location of a former uranium and vanadium processing facility that operated from 1954 until 1968. The milling operations created process-related wastes and a pile of radioactive tailings. DOE completed a cleanup of the site in 1986 under the Uranium Mill Tailings Radiation Control Act and encapsulated all the tailings and material associated with the cleanup in a disposal cell that was constructed over the existing tailings pile.

LM is responsible for the long-term care of the site and maintains extraction wells that remove contaminated groundwater in several locations. Because there is extremely limited natural groundwater in the area and DOE believes the source of contamination was water imported to the site for mill operations, the remedy is based on removing the groundwater and the associated contaminants.

The contaminated water is pumped from extraction wells, collected in interceptor drains along two washes, and pumped into a large pond where the contaminants are concentrated through evaporation for eventual



disposal. LM also conducts ongoing monitoring of groundwater and surface water to ensure that the disposal cell is not contributing to groundwater contamination and the remedy remains protective of human health and the environment.

LM also works closely with the Navajo Nation through regular meetings and communication with the Navajo AML Reclamation UMTRA department, which is funded through the cooperative agreement that DOE established to provide for collaboration at DOE sites on the Navajo Nation.

Following a presentation by the DOE site manager on the historical background and current DOE activities at the Shiprock site, local residents were encouraged to ask questions about the Shiprock site and DOE's ongoing activities. The Navajo AML Reclamation UMTRA department staff provided an ongoing translation of the presentation and questions and answers into the Navajo language. ❖



## Goal 4

### Sanitary Sewer Treatment Plant at Mound, Ohio, Site Recycled

The U.S. Department of Energy (DOE) Mound facility in Miamisburg, Ohio, is undergoing a \$1 billion remediation, transitioning into a green energy park and an industrial site which will be owned and managed by the City of Miamisburg's oversight organization, Miamisburg Mound Community Improvement Corporation (MMCIC). One large cost savings achieved during the remediation will be the recycling of a portable sewage disposal plant.

The DOE Office of Legacy Management (LM) currently operates and monitors the 306-acre Mound site, located in Miamisburg, Ohio, for the Office of Environmental Management (EM). When all remediation is complete in 2010, EM will transfer site ownership to the MMCIC for use as a commercial industrial site. MMCIC purchased the entire site with 22 remaining structures, including 17 buildings and 5 magazines, for \$10. During the environmental cleanup and transition, DOE worked closely with MMCIC to facilitate redevelopment and reuse of the site. LM will monitor the site indefinitely to assure that the site remains protective of human health and the environment.

In addition to reusing the land and buildings, DOE is recycling a portable sewage plant instead of disassembling and shipping it as scrap.

In 2005, EM installed a temporary sanitary sewage treatment plant (SSTP) intended to operate until the site could be connected to the City of Miamisburg sewer system. However, connection to the city proved to be a complicated process requiring extensive monitoring, surveying, cleaning, removal, and replacement of sections of the underground sewer lines. EM reached final agreements with U.S. Environmental Protection Agency (EPA) and Ohio EPA, Ohio Department of Health, and the City of Miamisburg, and connected the Mound site sewer system to the city sewer system in July 2009.

DOE drained, dewatered, cleaned, and surveyed the SSTP to assure there was no contamination trapped within the piping systems and walls. LM coordinated disposal of the dewatered sludge with EM, and their contractor, Accelerated Remediation Company. Cleaning and repeated surges were performed. Water usage was minimized by cleaning each section in turn and using the later stages of the treatment plant to clean the water used in the preceding stage. This water was then used for cleaning the succeeding stage. The planning and implementation of the cleaning was accomplished under the terms of the existing discharge permits for operations. Close coordination with the regulatory agencies allowed closure of the treatment plant and termination of the permits. The plant was free released with no restrictions for its reuse.

Although the SSTP is only four years old and in very good condition, no DOE or government entity wanted the plant. EM estimated that it



*Photos top to bottom: SSTP being assembled in 2005; sludge-dewatering equipment; dewatered sludge after removal from SSTP; pressure washing SSTP tank.*

Continued on page 14



## LM Sites



Continued from page 13

## Sanitary Sewer Treatment Plant at Mound, Ohio, Site Recycled

would cost \$230,000 in labor, shipping, and disposal charges to remove the plant.

LM coordinated a transaction where EM offered the plant to the original installation vendor, who agreed to disassemble and remove the plant at no cost to DOE. This vendor will sell part of the plant to a trailer park to recoup costs and will donate an unneeded tertiary filter from the SSTP to a Boy Scout camp.

LM managed the preparation, surveillance, and the ultimate removal of the SSTP for EM. EM and LM have worked closely to achieve the best possible outcome—reuse of property and savings of government funds.

During the course of this project, a piece of equipment was excessed, disassembled, loaded onto trucks, and removed at no cost to the government. In turn, it was reused by those who had a greater need for it. ❖



*Drained and pressure-washed SSTP tank.*



*Performing radiological survey of SSTP tank.*



## Goal 5

### Office of Legacy Management Welcomes New Employees

Brenda Waters joined the Archive and Information Records Management Team (AIM), LM-10.2, on December 20, 2009, as a Public Participation Specialist. Prior to joining the AIM Team, Brenda worked as the Training Coordinator for Office of Legacy Management (LM) under the Human Resources/Administrative Team, LM-10.4.

Kathy Tyer joined the LM Planning, Budget and Acquisition Team, LM-10.3, on November 8, 2009, as a Financial Management Specialist. Kathy previously worked in the Office of the Chief Financial Officer where she served as a Budget Analyst.

Cheryl Haggard joined the Archive and Information Records Management (AIM) Team, LM-10.2, on November 22, 2009, as a Program Analyst. Prior to joining the AIM Team, Cheryl worked as a Financial Management Specialist for the LM Planning, Budget and Acquisition Team, LM-10.3. ❖

## Legacy Management Goals



### Goal 1: Protect human health and the environment through effective and efficient long-term surveillance and maintenance.

This goal highlights DOE's responsibility to ensure long-term protection of people, the environment, and the integrity of engineered remedies and monitoring systems.

### Goal 2: Preserve, protect, and make accessible legacy records and information.

This goal recognizes LM's commitment to successfully manage records, information, and archives of legacy sites under its authority.



### Goal 3: Support an effective and efficient work force structured to accomplish Departmental missions and assure continuity of contractor worker pension and medical benefits.

This goal recognizes DOE's commitment to its contracted work force and the consistent management of pension and health benefits. As sites continue to close, DOE faces the challenges of managing pension plan and health benefits liability.

### Goal 4: Manage legacy land and assets, emphasizing protective real and personal property reuse and disposition.

This goal recognizes a DOE need for local collaborative management of legacy assets, including coordinating land use planning, personal property disposition to community reuse organizations, and protecting heritage resources (natural, cultural, and historical).



### Goal 5: Improve program effectiveness through sound management.

This goal recognizes that LM's goals cannot be attained efficiently unless the federal and contractor work force is motivated to meet requirements and work toward continuous performance improvement.



# Program Update

**Please help us reduce mailing costs** — To reduce mailing costs, we would like to send electronic links to information from LM via e-mail. Please provide us with your current e-mail address and contact information so that we may update our files. Thank you.

## Request for LM Public Documents

Name \_\_\_\_\_

Organization \_\_\_\_\_

Position \_\_\_\_\_

Street Address \_\_\_\_\_

City, State, and Zip Code \_\_\_\_\_

Phone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

E-mail Address \_\_\_\_\_

## Documents Requested

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

### Fax or Mail to:

Ms. Brenda Waters  
U.S. Department of Energy  
Office of Legacy Management  
1000 Independence Avenue, SW  
Washington, DC 20585  
Fax: (202) 586-1540

### or E-Mail Your Information to:

[LM@hq.doe.gov](mailto:LM@hq.doe.gov)

**To remove your name from the *Program Update* mailing list,  
send your request to the address or fax number specified above.**