



Office of Legacy Management  
U.S. Department of Energy



# Program Update

October – December 2006

Welcome to the October – December 2006 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 2



### The State of Environmental Justice in America 2007 Conference

Howard University School of Law, Washington, DC

March 29 – 31, 2007

Leaders from various sectors will engage in three days of exchanging new ideas and new approaches to environmental justice. This interactive training session will feature voices of experience, research, discussions, and thought-provoking dialogue. The program format will present the needs and challenges of communities, governments, municipalities, communities, faith-based organizations, and others with an interest in environmental matters and environmental justice. It will highlight programs and collaborations that work, as well as initiatives that have not been successful. Program speakers will include representatives from federal and state agencies, local governments, community groups, business and industry, public interest groups, academia, and other entities. This interactive forum will give conference participants the opportunity to network with people who have a variety of interests. All conference participants will be able to communicate with informative and productive resources that can support their individual program goals and objectives. Conference participants will also see examples of approaches that produce positive results through innovation and collaboration. The conference should prove beneficial and informative to participants.

Conference registration and hotel information can be found on the LM Environmental Justice website, [http://www.LM.doe.gov/env\\_justice/ejamerica2007\\_conference.htm](http://www.LM.doe.gov/env_justice/ejamerica2007_conference.htm)



## Goal 4

### LM Begins Operations at Fernald Preserve

After years of planning and teamwork, the U.S. Department of Energy (DOE) Office of Environmental Management has transferred responsibility of the Fernald, Ohio, Site to the DOE Office of Legacy Management (LM). Operational responsibility transfer began October 29 and was completed November 17, 2006.

Numerous accomplishments mark the transition. Seventeen teams were established to manage various aspects of the transition. More than 1,100 activities necessary to achieve success were tracked and implemented. Thirty-plus years of environmental data were migrated to new databases. Key staff members were identified and hired. Regulatory approval of the Legacy Management and Institutional



The Fernald Preserve, Ohio

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Controls Plan was achieved, and numerous other plans and protocols necessary to conduct work were established.

The 1,050-acre former uranium production plant played a critical role in the U.S. nuclear weapons program and is one of the largest environmental restoration projects ever completed. With the transition of responsibilities came a renaming of the site to The Fernald Preserve. The preserve is an example of how an industrial site can be restored to a natural state. Native trees, prairie grasses, and newly developed and enhanced wetlands encourage wildlife to inhabit the site.

### Goal 2

#### Weldon Spring Site Interpretive Center

LM maintains and operates the Weldon Spring, Missouri, Site Interpretive Center for the purpose of informing the public of site history, remedial action activities, and final conditions. The Interpretive Center also provides information about the long-term surveillance and maintenance program for the site, provides access to surveillance and maintenance information, and supports community involvement activities. It communicates the historical legacy of the site, provides educational and research opportunities for current and future generations, and makes

information available about contamination present at the site to guide people in making decisions about appropriate activities at the site.

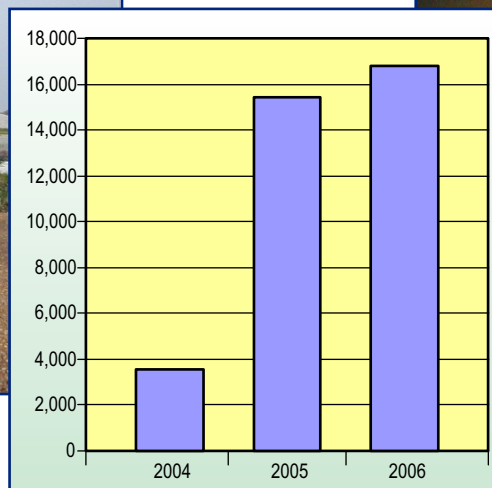
The level of community involvement with the Weldon Spring Site's Interpretive Center has increased dramatically over the past two years. Attendance at the Interpretive Center was 3,573 in 2004, 15,405 in 2005, and 16,772 in 2006. This increase is largely attributed to the site's efforts to expand and develop customized field trip programs for K–12 students.

Through mass mailings and establishing personal contact with many teachers in the St. Louis area, the Interpretive Center has built a reputation for providing students with quality educational programming that ties directly in with DOE's past remediation work and current long-term surveillance and maintenance mission for the site.

A typical field trip to the site lasts 2–3 hours and starts with a presentation of the site's history and an explanation of the activities the students will be participating in that day. After a short Q&A session, the students are then placed into two or three groups depending on the number of students, and rotated through the different activities. These activities are selected by instructors prior to the students' arrival so they can participate in programs that best fit their classroom needs. Activities may consist of hiking to the top of the disposal cell, completing a "scavenger



*The graph (below) shows attendance increase at the Interpretive Center (left); a student tries on protective clothing (right).*







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hunt” relating to displays in the Interpretive Center, and learning about site-related topics such as ground water, radioactivity, or prairies. For students who are unable to visit the site because of budget or travel restrictions, guest speakers can visit their classroom to present a lecture and hands-on activity relating to the site.

Community perception of the Interpretive Center to date has been very positive. Lois Miriam, a teacher at Pond Elementary School, Rockwood School District, remarked that, “The educational programs led by the knowledgeable staff of the Weldon Spring Site provided my students with not only a hands-on approach to learning, but concepts that can be applied to classroom visits even after their visit.” The Interpretive Center provides a unique way to address long-term surveillance and maintenance issues through its efforts to inform and educate the public.

### Goal 1

## Rocky Flats Environmental Technology Site

The Rocky Flats Plant near Denver, Colorado, served as a key component in the nation's nuclear weapons production program from 1953 until 1992. Renamed the Rocky Flats Environmental Technology Site (RFETS) when its mission was changed from production to cleanup, the site underwent a 10-year, \$7 billion cleanup project that was completed in October 2005. When DOE, the U.S. Environmental Protection Agency (EPA) and the State of Colorado signed the Corrective Action Decision/Record of Decision for the RFETS on September 29, 2006, LM assumed full responsibility for the long-term maintenance and surveillance of the Rocky Flats Site.

LM retains approximately 1,800 acres of the original 6,200-acre RFETS to implement the CERCLA remedy and ensure that the remedy remains protective of human health and the environment. The remaining 4,400 acres will be transferred to the U.S. Department of the Interior in early

2007; the U.S. Fish & Wildlife Service will manage the site as the Rocky Flats National Wildlife Refuge.

LM responsibilities at the Rocky Flats Site include ongoing surveillance and maintenance operations for 126 ground water monitor wells, four passive ground-water treatment systems, 17 surface water monitoring stations, and pond operations. LM is also responsible for maintaining two closed landfills and numerous ecological systems on site, including threatened Preble's meadow jumping mouse habitat and engineered wetlands. LM has enhanced the site's natural habitat through revegetation, erosion control, and noxious weed and pest control.

Records management is also an important responsibility at Rocky Flats, and LM maintains more than 45,000 cubic feet of archived records, including regulatory documents; the CERCLA Administrative

*LM contractors change the media in the Mound Site Treatment System at the Rocky Flats Site*



*Native grass seed and a fixative mulch are sprayed on the former West Access Road during winter revegetation operations at the Rocky Flats Site*



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Record; medical, radiological, and training records; site correspondence; and other key site documents.

LM is committed to ongoing community and public interaction at the Rocky Flats Site, primarily through the Rocky Flats Stewardship Council, which serves as the local stakeholders organization for neighboring communities and interested members of the public. The *Rocky Flats Legacy Management Agreement*, which is the tri-party agreement between DOE, EPA, and the State of Colorado that will implement the final remedy for the site, was released December 15, 2006, for a 45-day public comment period. Once all public comments have been reviewed, the final document is expected to be signed by the three parties in early 2007.

### Goal 1

#### Legacy Management To Host ERSP Meeting

LM is hosting a meeting for the Environmental Remediation Sciences Program (ERSP) in Grand Junction, Colorado, on February 27 through March 1. The ERSP is an expansion of the Natural and Accelerated Bioremediation Research (NABIR) Program funded by DOE's Office of Science.

Since 2002, the DOE office in Grand Junction has supported the NABIR Program at the Old Rifle Processing Site in Rifle, Colorado. NABIR focuses on the in situ bioremediation of metals and radio-nuclides in ground water. At the Old Rifle Site, NABIR scientists conducted field studies to enhance the reduction of uranium and other metals by stimulating the growth of certain indigenous bacteria, an effective method of removing soluble uranium and other metals such as vanadium and selenium from ground water.

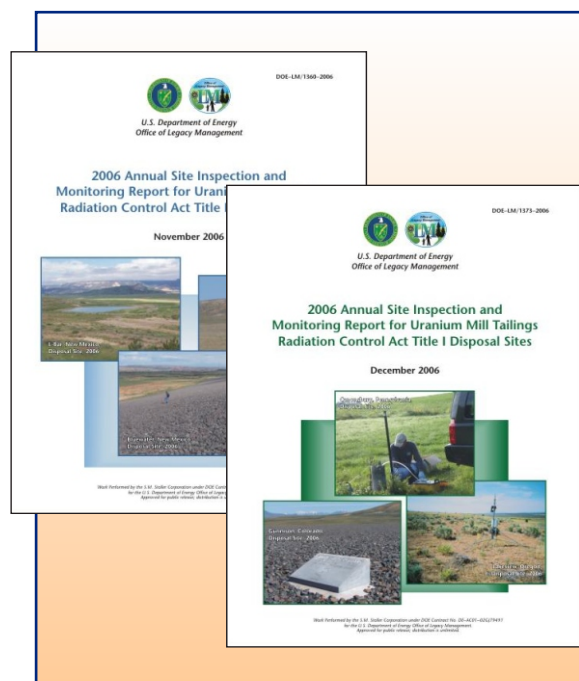
In 2006, the NABIR program was combined with Environmental Management Science Program to create ERSP. In November 2006, the Office of Science announced that the Old Rifle Processing Site will be funded as a winner of the Integrated Field-Scale Subsurface Research Challenge Site (along with Oak Ridge and Hanford) and is now a new Integrated Field Challenge Site (IFCS). As a result of this, 15 lead scientists and several other researchers will be evaluating the effectiveness and longevity of bio-stimulation at the site. The first phase of this research will be a scoping meeting in Grand Junction on February 27 through March 1. The co-principal scientists will discuss research plans for the next five years and take a field trip to the Old Rifle Site.

### Goal 2

#### 2006 UMTRCA Title I and Title II Disposal Sites Reports Made Available

In January 2007, LM made available the *2006 Annual Site Inspection and Monitoring Report for Uranium Mill Tailings Radiation Control Act Title I Disposal Sites* and the *2006 Annual Site Inspection and Monitoring Report for Uranium Mill Tailings Radiation Control Act Title II Disposal Sites*. In 2006, LM was responsible for providing long-term surveillance and maintenance services at 24 uranium mill tailings disposal sites established under Title I and Title II of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA).

Copies of the annual reports have been sent to information repositories associated with the Title I and Title II sites. These reports are also available on the LM website at [http://www.LM.doe.gov/pro\\_doc/guidance\\_reports.htm](http://www.LM.doe.gov/pro_doc/guidance_reports.htm)







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*Scientists from the Pacific Northwest National Laboratory and the University of Massachusetts collect sediment from core samples using a drill rig after an injection experiment has been completed. The injection of dilute vinegar provides food for indigenous bacteria, allowing them to grow and, in the process, reduce uranium and remove it from the ground water. The sediment samples will be analyzed for different bacteria colonies and geochemical properties.*

“We are very enthusiastic that the Old Rifle Processing Site is now an Integrated Field Challenge Site,” said Rich Bush, LM project manager. “This puts us in good company with other IFCSs at Hanford and Oak Ridge. We look forward to results that will help LM manage the UMTRCA sites more cost effectively and lead to closure more quickly.”

### Goal 4

#### LM Participates in Brownfields Conference

On November 13–15 in Boston, Massachusetts, LM participated in the U.S. Environmental Protection Agency and the International City/County Management Association 11th Annual Brownfields 2006 Conference.

The national Brownfields Conferences bring together key experts from all levels of government, business, and finance and from local communities to share ideas and experiences in the field of urban and environmental development. Participants in the conferences focus their efforts on properties known as “brownfields”—abandoned, idle, or underused industrial and commercial properties at which real or perceived contamination interferes with efficient expansion or redevelopment efforts. Additional information can be found at <http://epa.gov/brownfields/bfconf.htm>.

LM was a federal co-sponsor of the event and offered a presentation titled “Long-Term Stewardship: Institutional Controls on Department of Energy Sites.” LM also sponsored an exhibit display. Over 5,000 participants attended the conference.

LM Public Document(s) Request Form