



U.S. DEPARTMENT OF
ENERGY

Legacy
Management



Fernald
Preserve

Community Meeting

April 18, 2012

8891

The Office of Legacy Management's community meeting was held on April 18, 2012, at the Fernald Preserve Visitors Center. 14 people attended the meeting, which provided an update on site maintenance and discussed the public's use of the site.



Agenda

- **Health and Safety**
- **Natural Resource Trusteeship**
- **Fernald updates**
- **Site operations**
- **Site use**
- **6-Month Look-Ahead**

8891.02 4/12

Community meeting agenda.



Fernald Preserve

Legacy Management Mission



Manage DOE's post-closure responsibilities and ensure the protection of human health and the environment.

8891.03 4/12

The Office of Legacy Management's mission at the Fernald Preserve.



Worker Health and Safety

OSHA Recordables (yearly)

DOE Complex	LM	Industry
1.1	0.3	3.8

Fernald Preserve (quarterly)

Lost time	First aid	Recordables
0	0	0

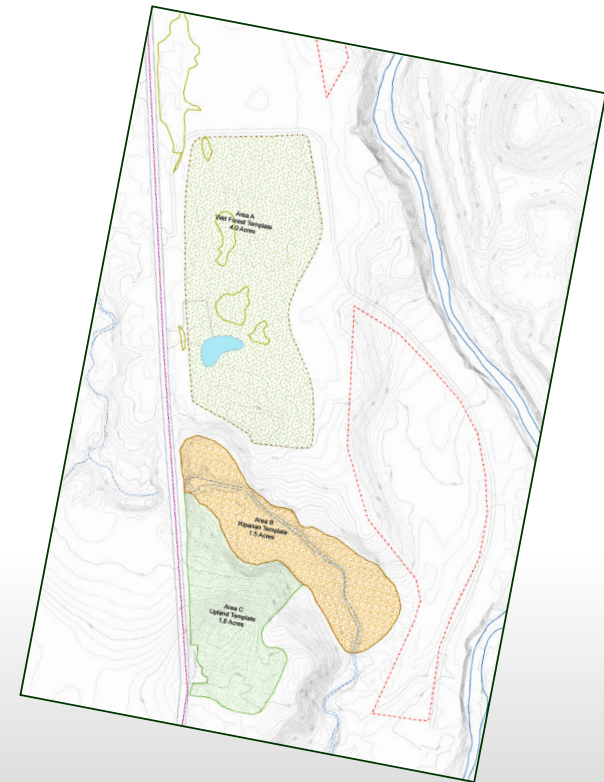
8891.04 4/12

Safety at the Fernald Preserve—and across the Office of Legacy Management complex—continues to surpass industry standards.



Natural Resource Trusteeship

- **Conservation easements**
- **Ecological restoration projects**



8891.05 4/12

Natural Resource Trusteeship activities at and around the Fernald Preserve continue.



Ecological Restoration

- **Restored area maintenance**
- **Ecological monitoring**
- **Site and On-Site Disposal Facility inspections**



8891.06 4/12

Ecological restoration work includes maintenance, monitoring, and inspections.



Inspections

Site and On-Site Disposal Facility

- **Site inspections**
- **On-Site Disposal Facility inspections**



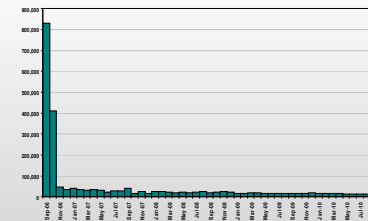
8891.07 4/12

The inspection process continues according to the *Comprehensive Legacy Management and Institutional Controls Plan*.



Sampling

- **On-Site Disposal Facility leak detection monitoring at 42 locations**
- **Groundwater sampling at 140 locations**
- **Surface water sampling at 21 locations**
- **Composite effluent sampling at one location**
- **Direct radiation monitoring at 11 locations**
- **Sediments sampling at two locations in the Great Miami River**
- **Continuing approved semiannual, quarterly, and daily sampling**



8891.08 4/12

Routine environmental monitoring is conducted to ensure the continued effectiveness of the site's cleanup. The current monitoring regimen includes sampling groundwater, surface water, treated effluent, and direct radiation.



On-Site Disposal Facility

2011 Performance

- **No indication of leaks**
- **Highest leak detection system maximum accumulation**
 - Cell 8: 0.38 gallons per acre per day (gpad)
 - 20 gpad initial response leakage rate
 - 200 gpad action leakage rate
- **Leachate collection system volumes have stabilized and continue to diminish**
- **Leak detection system accumulation rates indicate liner systems are performing within approved design**
- **Water quality comparisons between leachate and groundwater below the disposal facility indicate there are no leaks**
- **No visual signs of compromised cap integrity**

8891.09 4/12

The On-Site Disposal Facility cap and liner systems are performing as designed.



Aquifer Restoration

Through February 2012

- **4,775 gallons per minute target pumping rate**
- **23 extraction wells**
- **140 monitoring wells**
- **32.1 billion gallons extracted**
- **9.8 billion gallons treated**
- **10,983 pounds of uranium removed**
- **Project completion in 2026**
- **2011 groundwater pumping rate: 104 percent of design**
- **Water treatment facility operation 2–3 days per month to verify and maintain operability**

8891.10 4/12

Groundwater cleanup continues at the Fernald Preserve.



Aquifer Restoration

Treatment Capacity Reduction

- **In 2011, DOE worked with USEPA and the Ohio EPA to decide on a path forward that will adjust groundwater treatment capacity to better fit current and potential treatment needs**
- **Decision was made to continue to maintain operability of the CAWWT at a reduced treatment capacity of 500–600 gallons per minute**
- **Two treatment trains are being decommissioned (isolation in place) to achieve the throughput reduction**
- **Isolation work was completed this year**

8891.11 4/12

The U.S. Department of Energy, the U.S. Environmental Protection Agency, and the Ohio Environmental Protection Agency have reached an understanding that the U.S. Department of Energy is moving forward with the demolition and decontamination of the unneeded portion of the Converted Advanced Wastewater Treatment facility.



Site Use

- **Site use**
- **Visitors Center use**
- **Past events**
 - Star Watch, Owl Prowl, Sky Dance
- **Upcoming events**
 - Wildflower Walk, All About Birds, Goodness Snakes



8891.12 4/12

During the Fernald Preserve Visitors Center's fourth year of operation, a wide variety of groups—including students, birders, Scouts, and senior centers—have stopped by. Since the Fernald Preserve opened to the public in 2008, schools, conservation organizations, hikers, and cyclists have used the site, the Visitors Center, and the Community Meeting Room.



Look-Ahead

May–October

- **Continue aquifer restoration**
- **Continue sampling**
- **Continue ecological restoration and monitoring**
- **Continue On-Site Disposal Facility inspections**
- **Continue site inspections**
- **Continue wetlands mitigation monitoring**
- **Conduct prescribed burns**
- ***2011 Annual Site Environmental Report*** (June 1)
- ***Comprehensive Legacy Management Institutional Controls Plan*** reviewed, revised, and submitted to the regulator agencies (September 30)
- **Continue education programs**

8891.13 4/12

The 6-month look-ahead explains the work forecasted through the fall and winter.



Annual Community Meeting

Join us:

October 10, 2012

6:30 p.m.

Fernald Preserve Visitors Center



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8891.14 4/12

The next annual Fernald Preserve community meeting will be at 6:30 p.m. on October 10, 2012.