Fernald Preserve Aquifer Restoration

Extraction Well and Pump Maintenance Improvements

By questioning the way we perform tasks, we found a better way:

Our new method for pump/well maintenance has many benefits, including

- Maintaining our online well performance
- Increasing the life of our pumps
- Keeping well screens clean longer
- Reducing job safety hazards
- Reducing well field maintenance costs

Clog Removal Techniques

Old method had greater hazards and was more expensive

New method is safer and less expensive

- 166-acre groundwater uranium plume in the Sole Source Great Mined Aquifer
- Being remediated by the pump-and-treat method per CERCLA Record of Decision
- 23 extraction wells
  - Design target pumping rates from 100 to 300 gallons per minute each
  - Total well field design target pumping rate is about 9,000 gallons per minute, or 6.9 million gallons per day

Results of New Treatment Method

Results of Well Pump Cleaning With New Method
Legacy Management Goals

Protect human health and the environment through effective and efficient long-term surveillance and maintenance. This goal highlights the Department’s responsibility to ensure long-term protection of people, the environment, and the integrity of engineered remedies and monitoring systems.

Preserve, protect, and make accessible legacy records and information. This goal recognizes Legacy Management’s commitment to successfully manage records, information, and archives of legacy sites under its authority.

Support an effective and efficient work force structured to accomplish Departmental missions and assure contractor worker pension and medical benefits. This goal recognizes the Department’s commitment to its contracted work force and the consistent management of pension and health benefits. As sites continue to close, the Department faces the challenges of managing pension plan and health benefits liability.

Manage legacy land and assets, emphasizing protective real and personal property reuse and disposition. This goal recognizes a Departmental 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).

Improve program effectiveness through sound management. This goal recognizes that Legacy Management’s goals cannot be attained efficiently unless the federal and contractor work force is motivated to meet requirements and work toward continuous performance improvement.