

US EPA ARCHIVE DOCUMENT

RCRA Cleanup Reforms II
REGION 5 PILOT PROJECT DESCRIPTION

Pilot Project Name: Creating reliable institutional controls through a partnership with Ohio EPA using state proprietary law (equitable servitude).

Facility Name: Reserve Environmental Services and Shell Chemical Company

Description

1. What makes this project innovative? (Does the project speed achievement of Environmental Indicators? Why will the pilot project work?)

Risk assessments performed for corrective action programs conducted pursuant to the Resource Conservation and Recovery Act (RCRA) now consider reasonably expected future land uses when determining appropriate clean-up goals. Some properties will be remediated to a level that is safe for industrial or recreational uses; however, residual contamination may not allow for future residential development. These facilities require property use restrictions, commonly referred to as institutional controls. Reliability of institutional controls is directly related to the ability to bind current and future property owners to specified land use restrictions. The key to binding future owners is to establish a control that runs with the land (e.g. an easement, equitable servitude, restrictive covenants, etc...). The goal is to find a mechanism(s) and establish an approach to increase the reliability of institutional controls at RCRA facilities in Ohio.

In 2000, Region 5 did an extensive review of institutional controls. Region 5 assessed how these controls applied to RCRA corrective action. This review culminated in the March 2000 Region 5 Institutional Controls guidance document. Region 5 evaluated available legal tools to determine its ability to ensure that current and future owners will use the property in a manner consistent with the clean-up standards established as part of the risk assessment. The evaluation showed that Region 5 can reliably bind current owners by using RCRA 3008(h) and 7003 orders, and model language for these orders has been finalized. Regarding binding future property owners, Region 5 cannot take an interest in a property (which generally happens as part of establishing an easement.) Therefore, the Region is seeking to establish a partnership with the Ohio EPA to access legal mechanisms called equitable servitudes, that would be binding upon future property owners and require that they comply with the land use restrictions. To strengthen this partnership, Region 5 is evaluating its ability to become a third party beneficiary. If the Region is able to become a third part beneficiary, the Region can assist OEPA with the enforcement of the restrictions established through equitable servitude.

2. What are the benefits of this project (e.g., environmental, community, economic, other)?

Increase in reliability of long-term institutional controls.

Consistent and reliable approach to establishing institutional controls at RCRA facilities in Ohio.

3. How have you involved stakeholders in developing this project (for example; owner/operator, tribe, state/local agencies, local community, redevelopers, other interested parties)? Where applicable, please indicate the level of support of the owner/operator.

Region 5 RCRA and ORC staff are closely working with legal and program counterparts at Ohio EPA.

4. Who are the pilot participants and what is their role (for example; states, tribes, local agencies, other federal agencies, regulated industry, and environmental and community groups)?

Ohio EPA, Region 5 and ultimately RCRA facilities subject to institutional controls. Institutional controls for a given property would include mechanisms written and enforced by Ohio EPA and Region 5.

5. What is the potential for applying this innovative approach to other sites?

Potential is high given the large number (over 60 in the GPRA) of corrective action projects in Ohio.

6. What are the proposed project milestones and associated dates?

In 2001, Ohio EPA and Region determined this approach was feasible, and selected two RCRA facilities as pilots. In 2002, Region 5 and OEPA will negotiate orders with the RCRA facilities to implement the institutional controls.

7. Provide a brief description of the pilot facility, including location and regulatory status if pilot addresses a specific facility.

RCRA Facilities

Reserve Environmental Services (RES)

RES occupies about 156 acres in Ashtabula Township, Ohio. All land within 2,000 feet of RES is undeveloped and owned by RES or Cleveland Electric Illumination Company. About 62 residences are located within a 1-mile radius of RES, 2 of which are within a 0.5-mile radius of the facility. An unnamed branch of Whitman Creek flows to the north-northwest across the western portion of the facility.

Facility operations began in about 1964 and consist of the treatment or disposal of hazardous and non-hazardous wastes from local industries. Primary treatment processes at the facility include treatment of waste acid by neutralization with lime slurry. This neutralization process creates by-products, including nonhazardous salt water and metal hydroxide sludges. Until 1993, nonhazardous waste sludge was disposed in a series of settling lagoons in the western portion of the facility, and the nonhazardous salt water was injected into a deep well on site or transported off site for disposal. Currently the facility operates a non-hazardous landfill and is involved in cleanup of hazardous waste and substances on their property under an Administrative Order on Consent with U.S. EPA.

Proposed institutional controls are restrictions to eliminate the use of shallow and bedrock groundwater as a potable water supply at RES and affected off-site properties, and limit exposure to off-site surface water and sediment.

Contact Chris Black (312) 886-1451

Shell Chemical Company

U.S. EPA entered into a RCRA 3008(h) Consent Order with Shell Chemical Company, EPA ID No. OHD 004 343 117 on March 7, 1997. EPA issued a final decision on the selected remedy to cleanup the facility on April 23, 2002. The selected remedy requires Shell Chemical Company (now doing business as KRATON Polymers) to:

- C Excavate and dispose contaminated soil contributing to groundwater contamination;
- C Recover free-phase liquid floating on the water table;
- C Monitor the natural attenuation of groundwater contaminated with volatile organic compounds;
- C Place a protective topsoil cover, grade, and seed an old landfarm to minimize ecological exposure;
- C Further investigate elevated levels of arsenic in Davis Creek to assess impacts on the aquatic environment, and evaluate the need for remedies;
- C Submit a closure plan for the 12-acre area managing boiler slag and fly ash;
- C Maintain site access controls to minimize human exposure to site contaminants; and
- C Record institutional controls on the property deed that allow for non-residential use only unless the cleanup meets residential performance standards.

EPA and KRATON will enter into a Corrective Measures Implementation (CMI) Order to implement the final remedy. The order should be effective no later than September 30, 2002. It will require a schedule and workplan to construct and implement the selected remedy, and a Final Remedy Construction

Completion Report.

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CERCLA Sites

Ohio EPA would participate, on a site specific basis, in a similar project, conditioned on acceptable resolution of the state's concerns. U.S. EPA's CERCLA program will continue to participate in the pilot to offer expertise and assure consistency in implementing Institutional Controls (ICs) at both RCRA and CERCLA sites.

8. How and when will pilot progress be measured and reported?

Progress will be measured by the timely identification and resolution of any legal and administrative challenges. A determination on the feasibility of this approach was projected and achieved by the end of 2001. Orders will be negotiated with the pilot facilities in 2002.

9. Who will oversee the pilot (State and/or Region)?

Ohio EPA and Region 5.

10. Who are the key Regional/State contacts responsible for managing the pilot project (name, phone, affiliation)?

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