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Summary of RCRA Showcase Pilots





The Resource Conservation and Recovery Act (RCRA) Showcase Pilots are part of the second round of RCRA Cleanup Reforms announced by the U.S. Environmental Protection Agency (EPA) in January 2001. The pilots are intended to illustrate innovative efforts in RCRA Corrective Action cleanups at facilities nationwide and stimulate others to explore similar efforts to speed up progress toward EPA's cleanup goals under the Government Performance and Results Act (GPRA). EPA invites pilot proposals on a continuous basis.




For more information, visit: <http://www.epa.gov/correctiveaction>




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Regions	Facility/Location	Innovation Description	Innovation Type
1, 2, 3, 4, 5, 8	Various facilities across states and regions	Development of one standard Electronic Data Deliverable for the submittal of data samples collected in a wide variety of environmental media. The EDD is expected to allow faster, more focused reviews by project managers than is currently possible with paper copies. 	<ul style="list-style-type: none"> • Electronic Information Transfer/Documentation • Multi-state/regional
4,5,6,7,8	<p>Nucor Steel Mini-mills</p> <p>AR, IN, NE, SC, TX, UT</p>	Cleanup of steel mini-mills under a federal consent decree, which is the first comprehensive, multi-media settlement in the steel mini-mill industry. The cleanup will take place sequentially, in a prioritized, streamlined process and will be overseen by a coordinating committee. 	<ul style="list-style-type: none"> • Sector-based • Multi-state/regional • Streamlined Administrative Process • Enhanced stakeholder involvement
Region 1			
	<p>Sporting Goods Properties, Inc.</p> <p>Bridgeport, CT</p>	First-time use of remote control equipment to investigate large caliber unexploded ordnance (UXO) on a property that will be remediated and redeveloped, with a portion being donated to the Town of Stratford for a road project. The remote control equipment was previously used to investigate a bomb field.. 	<ul style="list-style-type: none"> • Investigation Technology • Brownfields Redevelopment
	Various facilities in Region 1	The Ten Most Wanted list is a compilation of the ten most common comments provided on RCRA Facility Investigation (RFI) work plans and reports. This “comment letter in advance” provides a tip sheet which minimizes generic flaws in work plans and other reports and thereby accelerates the Corrective Action process. 	<ul style="list-style-type: none"> • Comment Letter in Advance
Region 2			
	<p>Jersey Plating Co.</p> <p>Morris County, NJ</p>	Use of state non-RCRA cleanup program to provide financial assistance for assessment, investigation and remediation of the site. The facility does not appear to be financially viable or willing to perform Corrective Action work at the site, and federal financial assistance does not appear viable. The Town of Boonton wants to turn the site into a parking lot. 	<ul style="list-style-type: none"> • State non-RCRACleanup Program • Brownfield Redevelopment

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Region 3			
	<p>Former Lucent Richmond Works</p> <p>Henrico County, VA</p>	<p>Use of tree cores to define the groundwater plume and whether the Environmental Indicator is met for “Migration of Contaminated Groundwater Under Control.” Plume delineation through tree core analysis is a potentially cost-effective and simple approach, and offers EPA an opportunity to test a new tool for site characterization.</p> 	<ul style="list-style-type: none"> • Site Characterization
	<p>Genicom</p> <p>Waynesboro, VA</p>	<p>Use of a combination of innovative approaches (e.g., RCRA Prospective Purchaser Agreement (“PPA”), Comfort Letter) and traditional enforcement mechanisms to address both facility reuse and environmental concerns. The Genicom bankruptcy had the potential to lead to Genicom's abandonment of the facility, if unable to sell to a new owner.</p> 	<ul style="list-style-type: none"> • RCRA Prospective Purchaser Agreement/Comfort Letter • Brownfield Redevelopment
	<p>Region 3 and States</p>	<p>Integration of Region 3’s existing Corrective Action website with each state’s website in Region 3 to create a more comprehensive approach to public outreach and information access. Region 3’s revamped website will highlight cleanup programs implemented by EPA and its state partners.</p> 	<ul style="list-style-type: none"> • Website/Electronic Data Transfer/Documentation
	<p>US Steel-Fairless Works</p> <p>Fairless Hills, PA</p>	<p>Formation of a team to coordinate expedited cleanup efforts with redevelopment goals, and to use the flexibilities in the RCRA Corrective Action Program and the Pennsylvania Act 2 Land recycling Program.</p> 	<ul style="list-style-type: none"> • Streamlined Process • Early, frequent, Informal Communication • Brownfield Redevelopment
Region 4			
	<p>Atkemix Ten Inc. (Formerly Stauffer Chemical)</p> <p>Louisville, KY</p>	<p>Phased approach to site remediation allows the company to focus on meeting the Environmental Indicator goals, while going forward with final Corrective Action for the site and incorporating redevelopment objectives. The company can realize economic benefits and efficiencies with this approach.</p> 	<ul style="list-style-type: none"> • Phased Approach • Property Redevelopment

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Region 4			
	<p>Gaston Copper Recycling Corporation</p> <p>Gaston, SC</p>	<p>Formation of a core team to replace the traditional iterative process of exchanging papers and comments; development of an aggressive Corrective Action Schedule for investigation and remediation; and use of a site-wide geographical information system (GIS) which: (1) provides an electronic repository for quantitative and qualitative data, (2) provides a means to analyze site chemical data, and (3) serves as a communication tool for all stakeholders.</p> 	<ul style="list-style-type: none"> • Early, Frequent, Informal Communication • GIS/Electronic Information Transfer/Documentation • Brownfield Redevelopment
	<p>Velsicol Chemical Corp.</p> <p>Memphis, TN</p>	<p>Developed a volumetric assessment method to measure the effectiveness of a site-wide groundwater containment and recovery system in reducing contaminant concentrations and controlling contaminant migration. This is a low-cost and reliable means to quantitatively demonstrate plume stability for Environmental Indicator status (CA750). Groundwater monitoring data from three zones are annually assessed to demonstrate remedial performance and plume stability.</p> 	<ul style="list-style-type: none"> • Plume Stability Assessment Method • Facility-wide Approach
Region 5			
	<p>Abandoned RCRA treatment, storage or disposal sites in Wisconsin</p> <p>WI</p>	<p>The Wisconsin Department of Natural resources (WDNR) will, upon request, send letters to local governments or lender representatives who are taking ownership of abandoned RCRA treatment, storage or disposal facilities, and who have not acted to cause the contamination. These letters will provide assurance of State enforcement discretion for the site so long as the local government or lender meets criteria established by the WDNR. Such assurance letters will encourage municipalities and lenders to take title to abandoned properties, and control at least the immediate risks posed by the site. Without such letters, municipalities and lenders may be reluctant to take title to abandoned RCRA sites through foreclosure, because the cost of a complete cleanup might exceed the value of the property.</p>	<ul style="list-style-type: none"> • Wisconsin liability assurance (enforcement discretion) for abandoned brownfield sites
	<p>Arizona Chemical Co. (subsidiary of International Paper)</p> <p>Dover, OH</p>	<p>Low oversight approach for workplan completion, review and approval in order to reduce costs and speed remedy construction within the structure of a traditional 3008(h) order. Key aspects of the approach include dividing the remedy construction work into smaller, more manageable pieces and reducing the number of deliverables required.</p> 	<ul style="list-style-type: none"> • Low Oversight

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Region 5			
	Bridgestone/Firestone Noblesville, IN	Large-scale remedy is broken down into individual remedy components on separate project tracks. This approach allows for acceleration of certain parts of the remedy; stops delays of other projects while waiting for permits; allows for quicker Agency review and response time; balances the workload for both EPA and the facility; and avoids inefficiencies in implementation. 	<ul style="list-style-type: none"> • Low Oversight
	Chevron USA Hooven, OH	Early and frequent involvement of individuals and local and regional organizations in Corrective Action dialogue regarding the site, including redevelopment decisionmaking and participation in the Citizen Advisory Panel. 	<ul style="list-style-type: none"> • Enhanced Public Involvement • Brownfield Redevelopment
	Various RCRA, UST and CERCLA facilities OH	USEPA and Ohio EPA partnership to access legal mechanisms, including equitable servitude and easements, that would be binding upon future property owners and require that they comply with the land use restrictions for properties subject to RCRA, UST, and CERCLA. 	<ul style="list-style-type: none"> • Institutional Controls
Region 6			
	Borden Chemicals and Plastics Geismar, LA	Alternative approach to expedite traditional work plan approval process. The approach is based on improving communication between the company and the communication between the company and the regulators. The goal of this approach is to clearly communicate the investigation and cleanup objectives up-front to minimize any uncertainty, and to consider flexible alternatives to accomplishing those objectives. 	<ul style="list-style-type: none"> • Early, Frequent, Informal Communication
	Corrective Action Strategy Virtual Office	The Corrective Action Virtual Office tracks progress at each facility; provides open communication between all parties involved, with access to all documents that would have otherwise been submitted as paper copies; and provides a means to measure and record program success. 	<ul style="list-style-type: none"> • Electronic Information Transfer/Documentation

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Region 6			
	<p>Formosa Plastics Corporation</p> <p>Point Comfort, TX</p>	<p>This is an EPA Region 6 Corrective Action Strategy (CAS) Pilot. Evaluation of previously collected data with risk-based performance standards to prioritize corrective action efforts; development and use of conceptual site models in risk management decisions with realistic evaluation of current and future site and resource use; site-wide approach in groundwater monitoring and management; and informal, frequent communication among regulators and facility.</p> 	<ul style="list-style-type: none"> • Risk-based Performance Standards/Prioritization • Facility-wide Approach • Early, Frequent, Informal Communication
	<p>Great Lakes Chemical Co.</p> <p>El Dorado, AR</p>	<p>This is an EPA Region 6 Corrective Action Strategy (CAS) Pilot. Phased approach to remedy proposal; development of conceptual site model to develop performance standards and data objectives for site investigation; site-wide groundwater monitoring; risk-based priority screening for investigations and cleanup; realistic evaluation of current and future site and resource use; and frequent communication among regulators and facility.</p> 	<ul style="list-style-type: none"> • Phased Approach • Risk-based Performance Standards/Prioritization • Facility-wide Approach • Early, Frequent, Informal Communication
	<p>Koppers/Beazer</p> <p>North Little Rock, AR</p>	<p>This is an EPA Region 6 Corrective Action Strategy (CAS) Pilot. Risk-based priority screening for investigations and cleanup; development of conceptual site models to develop performance standards and data quality objectives early in the process; innovative use of DNAPL recovery techniques with possible use of institutional controls for dissolved phase off-site; and frequent communication among regulators and facility.</p> 	<ul style="list-style-type: none"> • Risk-based Performance Standards/Prioritization • DNAPL Technology • Early, Frequent, Informal Communication
	<p>Lucent Technologies</p> <p>Oklahoma City, OK</p>	<p>This is an EPA Region 6 Corrective Action Strategy (CAS) Pilot. Development of conceptual site model to develop data quality objectives and performance standards, and to ensure realistic evaluation of current and future site and resource use; risk management strategy for prioritizing corrective action work and developing flexible performance standards for the owner/operator; streamlined administrative procedure using Letter of Agreement mechanism rather than a permit renewal; frequent, informal communication among regulators and facility; and phased remediation and remediation selection balanced between treatment, engineering controls and institutional controls.</p> 	<ul style="list-style-type: none"> • Risk-based Performance Standards/Prioritization • Letter of Agreement as Alternate Authority • Early, Frequent, Informal Communication • Facility-wide Approach • Phased Approach

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Region 6			
	Randolph Air Force Base San Antonio, TX	Partnership between EPA Region 6, Texas Natural Resource Conservation Commission, Randolph Air Force Base, and the Air Force Center for Environmental Excellence to expedite the completion of RCRA corrective action activities at 23 Installation Restoration Program sites under the Texas Voluntary Cleanup Program. 	<ul style="list-style-type: none"> • Federal Facilities Partnership • State non-RCRA Cleanup Program • Early, Frequent, Informal Communication
	Remington Arms Co. Lonoke, AR	Use of: XRF screening technology for metals determination; ecological screening checklists to determine ecological receptors and habitats concerns up front; development of site conceptualization model to identify data gaps, develop site-specific performance standards, and establish data quality objectives; Letter of Agreement as an alternate authority; risk management strategy and performance standards; and development of a communications strategy. 	<ul style="list-style-type: none"> • XRF Screening Technology • Ecological Screening Checklists • Letter of Agreement as Alternate Authority • Risk-based Performance Standards/Prioritization • Early, Frequent, Informal Communication • Facility-wide Approach • Phased Approach
Region 7			
	Former Amoco Refinery Sugar Creek, MO	Phased approach to investigate the site; implementation of current and future remedial alternatives which blend with the goals of the Reuse Plan; and formation of the Amoco Focus Group. 	<ul style="list-style-type: none"> • Phased Approach • Enhanced Stakeholder Involvement • Brownfields Redevelopment
Region 8			
	Alliant TechSystems West Valley City, UT	Development of an Access Database for managing corrective action activities. The database was developed using Microsoft Access 2000, and is linked to the Utah Department of Environmental Quality sampling database. The Access Database will allow the State to expedite and better manage the complex corrective action assessments, investigations, and closer data at the facility. The Solid Waste Management Unit (SWMU) Database will enable the State to maintain and review detailed historical and current information pertaining to SWMUs. 	<ul style="list-style-type: none"> • Electronic Information Transfer/Documentation

Region 8

**Two adjacent refineries:
-Conoco
-Ultramar Diamond
Shamrock**

Denver, CO

Water flood technology to enhance the removal of free phase hydrocarbons from both refineries. This technology has commonly been used in the deep petroleum reservoir extraction industry, but has not been used for remediation purposes in a shallow unconsolidated aquifer environment.



- NAPL Removal Technology

**Texaco Refinery
(now closed)**

Casper, WY

Evaluation of two different technologies at former refinery. The first is to employ the use of microwaves to enhance non-aqueous phase liquid (NAPL) removal, a truly innovative approach that has only been tried at a few small sites around the country and never in a shallow unconsolidated aquifer where the hydrocarbons range from C4 - C30. The second technology will most likely be some type of an in-situ thermal technology.



- NAPL Removal Technology

**Wyoming Voluntary
Remediation of
Contaminated Sites
(VRCS)**

Development of a model Wyoming VRCS program. Wyoming's will be the second such Memorandum of Understanding that addresses RCRA permitted facilities (Michigan is the first.) Four chartered workgroups are working to develop rules, guidance and protocols for implementation of the new VRCS law.



- State non-RCRA Cleanup Program
- Enhanced Stakeholder Involvement

Region 9

**Romic Environmental
Technologies Corp.**

East Palo Alto, CA

In-situ bioremediation by injecting a carbohydrate solution (i.e., molasses and/or cheese whey), rather than synthetic compounds, into the shallow aquifer to enhance natural biological activity and consequently reduce the concentration of chlorinated volatile organic compounds (VOCs).



- In-situ Bioremediation Technology

Region 10

**Taylor Lumber & Treating,
Inc.**

Sheridan, Yamhill County,
OR

New approaches to RCRA-Superfund program integration to complete cleanup at a bankrupt facility, including: joint work to implement site characterization strategies; proposal of the site to the National Priorities List so the full range of Superfund authorities will be available when the facility does not have resources for cleanup; and involvement of the community in plans for cleanup and reuse of the site.



- RCRA-Superfund Program Integration re Bankrupt Facility
- Enhanced Stakeholder Involvement