

US EPA ARCHIVE DOCUMENT



Project XL Progress Report ExxonMobil Corporation



In 1995, the U.S. Environmental Protection Agency (EPA) embarked on a series of innovative initiatives in an effort to test new ways to achieve greater public health and environmental protection at a more reasonable cost. Through Project XL, which stands for eXcellence and Leadership, EPA enters into specific project agreements with public or private sector sponsors to test regulatory, policy, and procedural alternatives that will produce data and experiences to help the Agency make improvements in the current system of environmental protection. The goal of Project XL is to implement 50 projects that will test ways of producing superior environmental performance with improved economic efficiencies, while increasing public participation through active stakeholder processes. As of January 2001, EPA has reached its goal of 50 projects in the implementation phase. EPA Project XL Progress Reports provide overviews of the status of XL projects that are implementing Final Project Agreements (FPAs). The progress reports are available on the Internet via EPA's Project XL Web site at <http://www.epa.gov/Project XL>. Hard copies may be obtained by contacting the Office of Policy Economics and Innovation's (formerly the Office of Reinvention) Project XL general information number at 202-260-5754. Additional information on Project XL is available on the Web site or by contacting the general information number. The information and data presented in the January 2001 Progress Report is current as of December 2000.

Background

ExxonMobil (formerly Exxon Company USA) is a petroleum and petrochemical company responsible for all domestic oil and gasoline operations in 12 states, the Gulf of Mexico, and the Pacific Ocean off Southern California and Alaska. The Fairmont Coke Works Site, located in Fairmont, Marion County, West Virginia, was placed on EPA's National Priorities List (NPL) on December 23, 1996. ExxonMobil is the first XL project related to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also



ExxonMobil XL Project
Fairmont, West Virginia

Major Milestones

June 30, 1998 First Meeting of Fairmont Community Liaison Panel	September 10, 1998 Exxon XL Proposal Submitted	First Quarter 1999 Demolition of Buildings Begun	May 24, 1999 Final Project Agreement Signed	June 2000 Action Memo Signed
--	--	--	---	------------------------------------

known as Superfund. The site sits along the Interstate-79 industrial corridor, midway between Morgantown and Clarksburg, West Virginia. A corporate predecessor of ExxonMobil, Standard Oil of New Jersey, owned the site from 1920 to 1948. Sharon Steel Corporation bought the site in 1948 and operated a coke production facility there until 1979, when it ceased operations due to the company's inability to comply with Clean Air Act (CAA) and Clean Water Act (CWA) regulations. ExxonMobil is the only Potentially Responsible Party (PRP) working with EPA and the West Virginia Division of Environmental Protection (WVDEP) under an Administrative Order on Consent to address environmental concerns at this site. ExxonMobil reacquired the property and purchased approximately 100 acres of the Fairmont Coke Works Site in order to help facilitate cleanup and redevelopment.

Approximately 50 acres had been utilized by Sharon Steel for coke plant operations, waste treatment, and disposal. These 50 acres represent one of the few large parcels of flat, developable industrial land along Interstate-79 in this part of West Virginia. The remainder of ExxonMobil's property consists of wooded hillside, adjacent to the Monongahela River. The areas north, east, and south of the site are residential and industrial. The area west of the site is mostly undeveloped.

In the FPA, ExxonMobil has committed to achieve superior environmental performance by providing site improvements and enhanced community involvement not typically required by Superfund, while cleaning up the site in less time and at lower cost. Through a combination of enforceable requirements and voluntary goals, the ExxonMobil XL project is expected to improve the local environment and economy by:

- focusing on the economic redevelopment of the Superfund site to demonstrate that consideration of future beneficial uses early in the Superfund site management process can help improve the local economy;
- providing additional environmental benefits to the community that are not typical for Superfund sites, such as demolishing onsite structures both to improve the aesthetic value of the property and to facilitate redevelopment;
- employing faster, more efficient cleanup and redevelopment processes, such as streamlining the risk assessment process and reducing the administrative burden; and
- placing deed restrictions on the property to ensure that future activities do not result in any unacceptable risk to human health or the environment.

The Experiment

The ExxonMobil project is testing changes to the traditional Superfund process in order to clean up the Fairmont Coke Works Site in half the time a normal cleanup would take by using Superfund "non-time-critical" removal authorities. The changes affect: (1) the site characterization and cleanup; (2) the risk assessment process; (3) the management of onsite landfills; (4) the mitigation requirements onsite for EPA-created wetlands; (5) the stakeholder and community involvement process; (6) the reduction of paperwork requirements; and (7) the quality assurance process.

To facilitate and increase the likelihood that interested developers will use the site after cleanup for commercial or industrial development, ExxonMobil proposes to: demolish onsite structures; engage the services of redevelopment consultants and companies to determine how to make the site amenable to development; and work with local stakeholders to identify redevelopment options by preparing, among other things, a "potential for redevelopment" site assessment, an environmental assessment of the property, and a real estate market overview of the site with market options. ExxonMobil has used innovative stakeholder involvement techniques such as public availability sessions to explain project plans and obtain input on future site uses. This project has received a high degree of local community support.

The Flexibility

Superfund sites are typically approached in a phased process. After a site has been listed on the National Priorities List (NPL), a Remedial Investigation/Feasibility Study (RI/FS) is conducted at the site to assess risk and evaluate alternative technologies for remediation. The RI/FS culminates in a Record of Decision (ROD), which outlines the actions to be taken and documents the rationale behind the decision to take action at the site. Subsequently, the Remedial Design (RD) phase determines the specifications for cleanup actions which are implemented during the Remedial Action (RA) phase. These phases involve the submittal and approval of various documents and public comment periods. It is not uncommon for this process to require several years. Another cleanup approach in the Superfund program is the removal action, which can be completed in a significantly less amount of time. ExxonMobil has proposed to conduct the cleanup of this Superfund site as a series of short removal actions. An RI/FS and ROD are not required for a removal action. Long term remediation will occur if deemed necessary. This flexible approach is expected to reduce the time and cost needed to complete the cleanup.

The ExxonMobil XL project establishes a commitment to minimize the impact of a Superfund site on human health and the local environment by expeditiously cleaning up the site and to work with the local community to plan the response action and ensure the redevelopment of the site. As an incentive to achieve environmental performance, EPA and WVDEP will allow more flexible and cost-effective processes regarding: (1) the use of streamlined removal actions in order to expedite cleanup; (2) the mitigation processes for wetlands created by EPA during previous removal actions; (3) the data validation reporting requirements; and (4) the risk assessment criteria and analyses. These processes are available through the application of various technical and administrative alternatives within CERCLA and the CWA.

The statutory programs, and the EPA offices administering the programs, that affect the ExxonMobil XL project are the:

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) administered by the Office of Solid Waste and Emergency Response; and
- Clean Water Act (CWA) administered by the Office of Wastewater Management and Office of Wetlands, Oceans, and Watersheds.

Coordination of Removal and Remedial Actions. Unlike at most Superfund sites, this project allows ExxonMobil to begin the removal and remedial processes concurrently rather than sequentially. Because ExxonMobil does not have to wait for completion of the removal action before beginning long-term remedial actions, the entire process is expedited.

Site Investigation Process. EPA is allowing ExxonMobil to conduct an Engineering Evaluation/Cost Analysis (EE/CA), temporarily replacing a Remedial Investigation/Feasibility Study (RI/FS). The EE/CA can be conducted faster than a traditional RI/FS, in part because the future land use of the site has already been determined to be industrial/commercial.

Evaluation of Sampling Data. EPA has agreed to allow ExxonMobil to use its eight-step Data Usability Assessment (DUA) for the overall qualitative evaluation of the sampling data since ExxonMobil has invested significant time and money in proving that its quality assurance program is equivalent to Region 3 Modifications to the National Functional Guidelines. EPA, WVDEP, and ExxonMobil have agreed on terms for verification and recalculation of laboratory-reported concentrations for all EE/CA data.

Flexible Site Management Process. EPA is allowing ExxonMobil to designate the site's western area, which encompasses all of the waste management units (landfills, waste sludge areas and impoundments), as a single

area of contamination (AOC). The more common practice is to consider each waste source as a separate AOC. Although the decision to designate this type of area an AOC is not unique, it is unusual to make such a determination at the onset of the investigation. This designation will allow onsite management/disposal of wastes to proceed without triggering Resource Conservation and Recovery Act (RCRA) land disposal restrictions. Under RCRA, disposal or placement of RCRA classified hazardous wastes without previous treatment is generally restricted. Under the AOC concept, EPA has designated activities not considered land disposal or placement so that on-site waste management can proceed in a regulatory compliant and efficient manner without being construed as placement. This designation is justified due to the close proximity of the waste management units.

Flexible Wetlands Mitigation Requirements. EPA is allowing for flexible wetlands mitigation for those wetlands that may have been created by EPA during earlier removal actions.

Promoting Innovation and System Change

Project XL provides EPA opportunities to test and implement flexible approaches that protect the environment and advance collaboration with stakeholders. EPA is continually identifying specific ways in which XL projects are helping promote innovation and system change. The innovations and system changes emerging from the ExxonMobil XL project are described below.

Coordinating Redevelopment Activities with Cleanup Actions. At the same time that removal and remedial processes go forward, ExxonMobil is proceeding with redevelopment-related activities. ExxonMobil has engaged the services of real estate consultants and companies to determine how to make the site most amenable to redevelopment and to determine how best to market the site. ExxonMobil is also: (1) working with local and state redevelopment agencies to identify redevelopment options and developers; (2) soliciting the opinions of the community; and (3) improving the site's aesthetics and marketability by demolishing onsite structures.

Paperwork Reduction. Draft copies of reports required under the EE/CA process will be electronically transmitted, final reports distributed on compact disk, and analytical data made available to EPA and WVDEP, through the testing laboratory's data management system. There are passwords established to allow regulators access to this system. All pertinent documents will be available on the Project XL Web site.

Potentially Responsible Party (PRP) to Fund State Participation in the XL Process. ExxonMobil and the state have agreed that ExxonMobil, the PRP, will fund the state's involvement in this XL project in order to avoid the delays inherent in seeking Federal funding, in pursuing civil action, or in entering into cooperative agreements. Direct funding will reduce the state's financial and administrative burden and increase its ability to participate in Project XL.

Community Involvement. ExxonMobil has used innovative stakeholder involvement techniques such as public availability sessions and frequent stakeholder meetings to explain project plans and obtain community perspective on future site uses. The company has also provided a \$5,000 grant to the local high school for students to enhance a nature trail and develop a freshwater pond. This project will help local citizens understand the interaction of various life forms with the environment. Through these efforts, this project has received a high degree of local community support. The project provides an opportunity to analyze a unique approach to working with community members and other stakeholders throughout the process of selecting and implementing a cleanup remedy and determining the future uses of the site. The techniques used in this project may be useful to other communities with similarly distressed properties by allowing them to reclaim those properties as valuable and productive assets.

Project Commitment Summary

This table and the environmental performance section that follows summarize progress in meeting the FPA's commitments for the Fairmont Coke Works site.

Commitment	Status
Removal Actions	
ExxonMobil will demolish most of the existing structures on the site regardless of condition or potential hazards.	Completed in third quarter of 1999.
ExxonMobil will conduct an Engineering Evaluation/Cost Analysis (EE/CA).	Report on the waste management area was completed in first quarter of 2000.
ExxonMobil will complete non-time critical removals specified in the Action Memorandum.	To begin after completion of the EE/CA. An action memo was signed in June 2000. The non-time critical removal action to address the waste management area has been initiated.
ExxonMobil will implement post-removal site controls.	To begin after the non-time critical removals are completed.
Reuse/Redevelopment Planning	
ExxonMobil will work with the EPA, WVDEP, and the community to facilitate productive reuse of the property.	ExxonMobil has been scheduling approximately monthly meetings with all parties to discuss all aspects of the project.
As part of the site disposition strategy, ExxonMobil will work with all parties to develop a real estate market analysis, including an analysis of the potential redevelopment, an environmental assessment, a market overview, and the identification of market options.	Completion of a preliminary site assessment is anticipated in the third quarter of 2000. Preliminary marketing should begin in fourth quarter of 2000.
ExxonMobil will work with all parties to develop the financial analysis portion of the site disposition strategy.	The financial analysis has not yet been addressed.
ExxonMobil will work with all parties to develop the site disposition plan portion of the site disposition strategy.	The site disposition plan has not yet been addressed.

Commitment	Status
Remediation	
The parties (ExxonMobil, EPA, WVDEP, and the community) will work together to plan and implement response actions.	The parties have been holding meetings approximately once a month since June 1998.
Conduct an RI/FS, if necessary, after completion of the removal closeout. EPA will prepare a Record of Decision (ROD), if necessary.	To be done after completion of the Action Memorandum, if needed. To be done after the RI/FS, if needed.
ExxonMobil will implement the remedy specified in the ROD.	To be done after the ROD is signed.
Wetlands Identification/Mitigation	
ExxonMobil will survey and map the wetlands created during EPA's interim removal actions. ExxonMobil will evaluate the maps. If necessary, mitigation requirements will be proposed.	A meeting was held in November 1999, to discuss assessments performed by the West Virginia Department of Natural Resources, U.S. Fish & Wildlife, and EPA Region 3. EPA has determined that the wetland areas are part of existing drainage system, therefore, no mitigation will be required.
In the process of any remediation, ExxonMobil will improve designated wetland areas.	To be determined during site remediation.
General Reporting	
Quarterly report of removal/remediation progress.	Quarterly reports from ExxonMobil's engineering contractors began in the fourth quarter of 1998, and are available through the third quarter of 1999. However, EPA has determined that the minutes from the monthly meetings have provided sufficient information and has therefore suspended the quarterly report requirement.
ExxonMobil will explore various electronic means for transferring data, communications, and reports.	Most reports and communications to date have been transmitted electronically.
Stakeholder Involvement	
ExxonMobil has committed considerable resources toward seeking out the input, involvement, and support of stakeholders in the cleanup and redevelopment processes.	ExxonMobil has hired consultants to conduct interviews to identify members for the FCLP, and to keep the community informed. Monthly community meetings, facilitated by ExxonMobil-hired consultants, are held with all stakeholders.
ExxonMobil will fund WVDEP participation in Project XL.	The state is reimbursed directly by ExxonMobil for time and expenses incurred.

Environmental Performance

This section summarizes progress in meeting the environmental performance commitments described in the FPA in comparison to the baseline—what would have been required under the conventional Superfund site management process. The baseline is derived from an overall impression of best practices in the program. There is no single baseline that applies to all Superfund sites because the cleanup approach for each Superfund site is based on site-specific factors and after extensive evaluation of individual site characteristics. Under the removal action order, the following commitments are enforceable: a human health risk assessment, the AOC concept, flexible wetlands mitigation, redevelopment, stakeholder involvement, quality assurance, and recordkeeping. There are no regulatory requirements for the other commitments.

The initial step in the cleanup was to demolish the structures and buildings onsite. The concrete and brick from the old structures have been crushed and turned into fill material to use for site grading in later stages on the project. Then, an EE/CA was performed to better analyze the waste management areas on the western portion of the site. The EE/CA identified polycyclic aromatic hydrocarbons (PAHs), and breeze (very fine coal powder), as substances of potential concern. The risk of direct contact with these contaminants at the site will be addressed by a non-time critical removal action (NTCRA) described in a June 2000 Action Memo prepared by EPA's Office of Emergency and Remedial Response (OERR).

The Action Memo estimates the recycling of approximately 13 percent, or 7,600 cubic yards, of the waste from the western portion of the site. For example, much of the breeze at the site, although fine, still has value as an energy source and will be blended and burned as fuel. The remainder of the waste will be disposed of onsite in a RCRA subtitle C landfill, a landfill that accepts hazardous waste. In addition, the process of remedy selection has been streamlined through the use of the landfill presumptive remedy guidance. Presumptive remedies are preferred technologies for common categories of sites, based on historical patterns of remedy selection and EPA's scientific and engineering evaluation of performance data on technology implementation. The objective of the presumptive remedies initiative is to use the program's past experience to streamline site investigation and speed up selection of cleanup actions. This removal action is underway and is anticipated to be completed in fall 2001. Concurrently, preparation for a second EE/CA is underway to address soil contamination and hot spots in the eastern process area.

In addition, EPA has determined that the onsite wetlands are part of existing drainage systems, therefore, in accordance with the FPA,



Fairmont Coke Works — 1/14/99 — Beginning the demolition. Trackhoe demolishes some of the onsite structures. This demolition will help to prepare the site for redevelopment.



Fairmont Coke Works — 4/5/99 — The demolition is near completion, with many of the structures completely leveled.



Fairmont Coke Works — 2/10/2000 — By the winter, all demolition work is complete. This view looks across the snowcovered site, now leveled for future redevelopment.

no mitigation will be required. However, during the course of site remediation, these areas may need to be regraded to improve drainage.

Stakeholder Participation

ExxonMobil has committed considerable resources toward seeking out and obtaining the input, involvement, and support of parties who have a stake in the environmental impacts of this project. The organizations directly involved in negotiating the FPA are the EPA, the WVDEP, the Fairmont Community Liaison Panel (FCLP), and ExxonMobil Company USA. The FCLP is a panel of approximately 25 local citizens identified from a wide range of professional, academic, political, and private sources. The community panel activities are coordinated by a facilitator hired by ExxonMobil.

In order to facilitate the formation and activity of the FCLP, ExxonMobil:

- hired consulting firms to conduct a series of community interviews to identify issues of concern and perceptions, and to solicit participation in the panel;
- scheduled monthly meetings to develop the FPA and implement the XL project;
- established a toll-free project hotline for use by the community;
- used media (radio, TV, newspapers), direct mailings, a community information line, and community group meetings to disseminate information to, and conduct surveys of, area residents; and
- committed to pay for the WVDEP cost for participating in the XL project.

Six-Month Outlook

The key focus areas for the continued implementation of the FPA over the next six months will be the following.

- Continue approximately monthly meetings of the stakeholders (ExxonMobil).
- Complete non-time critical removal at the western portion of the site (ExxonMobil).
- Begin work on the second EE/CA to assess the risks at the eastern process area (ExxonMobil).

Project Contacts

- Art Chin, ExxonMobil Company USA, (908) 474-7395.
- John Hannig, ExxonMobil Company USA, (908) 474-6637.
- Hilary Thornton, EPA Region 3, (215) 814-3323
- John DuPree, EPA Headquarters, (202) 260-4468.
- Tom Bass, WVDEP, (304) 558-2745.
- Michael Cummings, FCLP, (304) 367-1449.
- Nick Fantasia, FCLP, (304) 366-3700.

Information Sources

The information sources used to develop this progress report include (1) the FPA for the ExxonMobil XL project; (2) *Project XL Stakeholder Involvement Evaluation -Final Draft Report*, May 2000; (3) focus group discussions in December 1999 with representatives of ExxonMobil Corporation, Federal and state regulatory agencies, and representatives of the local community; and (4) Project XL Progress Report Exxon Company USA, December 1999.

Glossary

Action Memorandum: A decision document that substantiates the need for a removal action, identifies the proposed action, and summarizes the rationale for the removal action selected. It parallels the function of a Record of Decision (ROD) in traditional remedial actions.

Area of Contamination (AOC): A waste source (e.g., waste pit, landfill, waste pile) and the surrounding contaminated soil.

Baseline: The measure by which future environmental performance can be compared.

Clean Air Act (CAA): The CAA is the comprehensive Federal law that regulates air emissions from area, stationary, and mobile sources. This law authorizes EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment.

Clean Water Act (CWA): The CWA sets the basic structure for regulating discharges of pollutants to waters of the United States. The law gives EPA the authority to set technology-based effluent standards on an industry basis and continues the requirements to set water quality standards for all contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained under the Act.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): CERCLA is the legislative authority for the Superfund program which funds and carries out EPA solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List (NPL), investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions.

Data Usability Assessment (DUA): ExxonMobil's eight-step quality assurance process by which data collected are quantified, and where necessary qualified, and the data's overall usability determined.

Engineering Evaluation/Cost Analysis (EE/CA): A report that summarizes site characterization data and determines medium-specific, risk-based goals for protecting human health and the environment, as well as summaries, the scope, effectiveness, implementability, and cost of the various alternatives that meet the objectives of removal actions that are not time critical.

Final Project Agreement (FPA): The FPA outlines the details of the XL project and each party's commitments. The project's sponsors, EPA, State agencies, Tribal governments, other regulators, and direct participant stakeholders negotiate the FPA.

Media: Specific environments —air, water, soil— which are the subject of regulatory concern and activities.

Multimedia: Several environmental media, such as air, water, and land.

National Priorities List (NPL): EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund. The list is based primarily on the score a site receives from the Hazard Ranking System. EPA is required to update the NPL at least once a year. A site must be on the NPL to receive money from the Trust Fund for remedial action.

Potentially Responsible Party (PRP): A PRP is the owner or operator of a contaminated site, or the person or persons whose actions or negligence may have caused the release of pollutants and contaminants into the environment, requiring a remedial action response under CERCLA and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The PRP is potentially liable for the cleanup costs in order to compensate the government for its remediation expenditures.

Record of Decision (ROD): A legal document signed by the EPA that describes the final cleanup action or remedy selected for a site, the basis for the EPA's choice of that remedy, public comments on alternative remedies, and the cost of the remedy selected.

Remedial Action: The phase of the cleanup process in which waste is actually treated, disposed, or contained.

Remedial Investigation/Feasibility Study (RI/FS): The in-depth planning and investigation of a site during which the nature and extent of contamination and risk are determined, and treatments and alternatives are evaluated.

Removal Action: An early or short-term action in the Superfund process conducted to stabilize or clean up a site in order to reduce the immediate risk to the public or the environment.

Superfund: The program operated under the legislative authority of CERCLA and SARA that funds and carries out EPA solid waste emergency and long-term removal and remedial activities. These activities include establishing the NPL, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions.

Wetlands: Ecosystems in which the water table is at or near the surface, such as a swamp or marsh. The sluggish water in these systems often create rich habitats for plants and wildlife.