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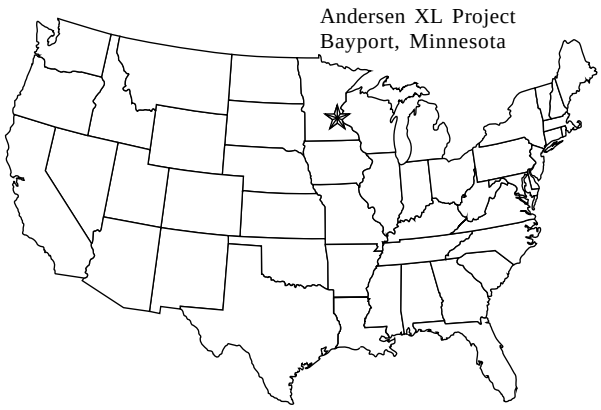
Project XL Progress Report
Andersen Corporation

On March 16, 1995, the Clinton Administration announced a portfolio of reinvention initiatives to be implemented by the U.S. Environmental Protection Agency (EPA) as a part of its efforts 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 October 1999, 15 XL projects are in the implementation phase and 35 XL projects are under development. 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. Or, hard copies may be obtained by contacting the Office of Reinvention's Project XL general information number at 202-260-7434. Additional information on Project XL is available on the web site or by contacting the general information number.

Background

The Andersen Corporation is a leading manufacturer of durable, energy-efficient, high-performance clad wood windows and patio doors. Andersen's main manufacturing plant is located in Bayport, Minnesota, along the St. Croix River, a federally designated "Wild and Scenic River" which forms the border between Minnesota and Wisconsin. Existing manufacturing facilities are located on the 110-acre Fourth Street Site, which consists of 78 buildings, most of which are interconnected. Andersen purchased an undeveloped 245-acre tract of land in 1994 that is located approximately 1 mile west of the Fourth Street manufacturing complex. This plot, which is referred to as the Andersen West Site, is intended to be used as an expansion site for various operations.



Major Milestones

- January 30, 1998 — Andersen Project Proposal Submitted
- June 30, 1999 — Final Project Agreement Signed
- Summer 2000 — Minnesota Pollution Control Agency Issues XL Permit
- Late Summer 2000 — EPA Rule Effective Date
- Late Summer 2010 — Termination of FPA

The Fourth Street Site, together with the Andersen West Site, are collectively referred to as the Bayport Facility. Manufacturing and related processes at Andersen's Bayport Facility include wood cutting and milling, wood preservative application, painting, vinyl processing, adhesive operations, by-product transfer, wood-fired boilers, assembly operations, technology development, production support, and maintenance functions.

The Andersen project will test an innovative experiment to reduce air emissions per unit of production. This reduction will be achieved by using performance-based regulatory approaches based on volatile organic compound (VOC) emissions per standard measure of production: the "performance ratio." While providing an incentive for better performance, the performance ratio will essentially lock in Andersen's current production methods and processes. The ratio obviates a return to traditional solvent-based coating and wood-preservative processes, while allowing the company the flexibility to research even greater efficiencies and emissions improvements. The company will be allowed to increase production levels without undergoing case-by-case reviews prompted by VOC emission changes, as long as its VOC emissions per unit of production remain below the performance ratio and its overall emissions remain below a facilitywide VOC cap.

The anticipated superior environmental benefits of the Andersen XL project include

- maintaining or reducing current levels of VOCs and milling and nonmilling particulate matter (PM) emissions at the Bayport Facility by implementing an enforceable mass-emissions cap and a subcap for PM at the adjacent Andersen West Site;
- committing that any new paint and preservative processes will perform as well as existing environmentally efficient processes;
- installing baghouse filters, or any other pollution control devices found to be the best available control technology (BACT), on all suitable milling equipment;
- ensuring that air toxic levels remain below risk-based levels;
- attempting to cease operation of the oldest diptank on site within 5 years after the start of the XL project;
- continuing to study and evaluate the concept of recycling windows as feedstock for the Fibrex composite process, and reporting the findings to the Community Advisory Committee (CAC), the Minnesota Pollution Control Agency (MPCA), Washington County, and EPA by no later than 2 years after the effective date of the FPA;
- continuing to use an Environmental Management System (EMS) to move beyond compliance; and
- expediting efforts to produce more of its window and door components with more environmentally friendly materials and processes, such as Fibrex composite, waterborne preservative treatment, and higher solids paint coatings, thereby encouraging continued reductions in its use of virgin materials.

The Experiment

The Andersen project aims to reduce air emissions per unit of production by using performance-based regulatory approaches based on VOC emissions per standard measure of production. The company will be allowed to increase production levels without undergoing case-by-case reviews prompted by VOC emission changes, as long as its VOC emissions per unit of production remain below the performance ratio and its overall emissions remain below a facilitywide VOC cap.

The Flexibility

In return for superior environmental performance, EPA, the MPCA, and Washington County intend to offer Andersen Corporation regulatory flexibility under this Project XL pilot. The project will allow modification

and addition of preapproved sources (such as waterborne treatment lines and Fibrex production) without additional review by EPA or the MPCA. EPA and the MPCA agreed to develop both a site-specific rule under the Clean Air Act's Prevention of Significant Deterioration (PSD) program and a streamlined Minnesota Project XL multi-media permit (Minnesota XL Permit). The Minnesota XL Permit will be a consolidation of Andersen's various environmental obligations. The permit will, to the extent possible, combine air, hazardous waste, and water discharge conditions at the Bayport Facility into one permit, and it will incorporate the Federal air permit as required by Part 40 Code of Federal Regulations (CFR) Part 70 for the Bayport Facility.

The modifications that would be allowed under the XL Permit trigger Minnesota's environmental review requirements. Therefore, the MPCA will prepare an Environmental Assessment Worksheet (EAW) on the project. An EAW gathers and discloses information about a project and its potential environmental consequences.

In addition, the XL project allows Andersen, with the approval of EPA, the MPCA, and the CAC, to remove its door paintline catalytic oxidizer control equipment if the company converts a portion of the paintline to waterborne coatings. Andersen must show that cost savings resulting from shutting this equipment down have been reinvested in emission reduction projects.

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

- Clean Air Act (CAA) programs administered by EPA's Office of Air Quality Planning and Standards;
- Resource Conservation and Recovery Act (RCRA) programs, administered by EPA's Office of Solid Waste; and
- Pollution Prevention Act (PPA) programs administered by EPA's Office of Prevention, Pesticides, and Toxic Substances.

Air Quality Permitting. The XL Permit will eliminate emission limits on certain existing processes (i.e., limits that prevent these processes from being used once the limit is reached) and combine 26 different emission limits applicable to Andersen's two diptanks into one rolling average limit. The MPCA will provide Andersen with flexibility on closure of the facility's diptanks.

The XL Permit will contain the CAA Title V, minor New Source Review (NSR), and PSD permits. The XL Permit will be issued subject to public notice and comment, and the opportunity for EPA to raise objections and petition the public. During the permit's development, overlapping or conflicting conditions from existing permits will be combined or reconciled, as allowed by applicable requirements. The flexibility granted Andersen Corporation includes relief from specific applicable synthetic minor air emission limits with the condition that Andersen comply with the site-specific permit limits for PM and certain VOCs. The new permit establishes emission caps for these compounds both on a "per standard measure of production" basis and a facilitywide basis. Andersen will be allowed to modify or add VOC units and modify or add certain PM and PM-10 units as long as the emissions remain below the caps established in the permit. This regulatory flexibility grants preapproval for emission increases that would otherwise require permit modification approval by the regulatory agency. The Minnesota XL Permit will, to the extent possible, reduce the administrative burden through simplified monitoring, reporting, and record keeping.

The installation or modification of large emission units at Andersen's Fourth Avenue Site are currently subject to PSD regulations. To avoid future PSD review, a facility may accept a "synthetic minor limit," which restricts the new or modified unit's emissions below applicable major source or modification threshold levels. Andersen's Fourth Avenue Site is currently subject to eight different VOC synthetic minor limits. Under this project, Andersen has requested relief from these specific current synthetic minor limits at the Fourth Avenue Site. In response, EPA plans to propose and promulgate (subject to public review and comment) a

site-specific regulation that would revise 40 CFR 52.21 (r)(4) and 40 CFR 52.21 (b)(3)(ii)(a) as they apply to Andersen. This regulation would in turn enable the MPCA to issue a permit that eliminates specific synthetic minor air emission limits on VOCs that apply to the Fourth Avenue Site, so long as certain conditions described in the rule are satisfied.

To release Andersen from existing synthetic minor limits on PM, Andersen must receive a PSD permit as required by law. The MPCA has been delegated the authority to issue PSD permits in the State of Minnesota subject to administrative review before the EPA's Environmental Appeals Board. To streamline certain Title V and minor NSR permit modification requirements, the PSD permit will preauthorize certain types of changes. The PSD permit will include sufficiently detailed descriptions of the preauthorized changes for compliance purposes, and it will give the public sufficient notice of the types of changes that will be authorized. The descriptions also will identify all applicable requirements, such as for periodic monitoring or record keeping, that would apply to the proposed change.

Hazardous Waste Permitting. Andersen will obtain flexibility related to its wood-treating process equipment. Specifically, the Corrective Action Agreement dated May 4, 1995 between the MPCA Hazardous Waste Division and Andersen Corporation will be terminated. All remediation activities related to the dismantling of Andersen's wood-treating equipment in Building 15 are now to be managed and controlled through the commitments in the FPA, the Minnesota XL Permit, and the January 27, 1987 Superfund Consent Order between Andersen and the MPCA. Currently, the May 4, 1995 Corrective Action Agreement requires the shutdown and removal of both diptanks and of the floodcoater. However, the MPCA agrees with Andersen that removal of the tanks at this time is not warranted environmentally. The east diptank never used penta-based preservatives. The floodcoater reservoir already has been cleaned and closed. The west diptank will be cleaned when it is no longer used. Based on groundwater monitoring data, the tanks do not currently leak and will not likely add any contamination to the groundwater. Previous releases, including soil contamination due to a rail car spill in September 1982, are being effectively remediated through Andersen's groundwater treatment system. That contamination is being effectively remediated through Andersen's groundwater treatment system. Its continued operation is required by the Superfund Consent Order, which will remain in effect.

Andersen will be allowed to keep the floodcoater reservoir capped, and will be allowed to clean and cap the west diptank reservoir once it is permanently shut down.

In addition, Andersen will be allowed to manage the metal components of its dismantled wood- treating equipment from Building 15 by transporting its components to metal-smelting operations for recycling.

Promoting Innovation and System Change

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

Performance Ratios. This project represents an innovative approach to allow changes in manufacturing processes that may result in reduced air emissions per standardized measure of production. The project also provides an opportunity to test whether a tiered air emission ratio system with both rewards and penalties can provide a better incentive for reducing air emissions. The project will result in a new, flexible, performance-based approach designed to achieve superior environmental results and cost savings. The main measure of VOC efficiency is a comparison of the performance ratio to the CAC Limit. This community-driven limit, set below the Enforcement Limit, is defined so as to encourage Andersen to go beyond compliance without being threatened with penalties if it should fail to meet these higher standards, and establishes the stakeholder group's important role in ensuring Bayport Facility environmental performance. The project will provide EPA with

important reference data.

Multi-Media Permitting. The Minnesota XL Permit is intended to facilitate multi-media permitting approaches to environmental protection. In March 1999, EPA approved a detailed plan for "The Next Generation in Permitting." The multi-media permit concept is an important part of this plan and is expected to be a key component in the Agency's ongoing permit improvement process.

Administrative Burden Reduction. A number of XL projects are testing different approaches to reducing the administrative permitting and reporting requirements imposed by Federal, state and local regulatory agencies. This XL project will result in cost savings to Andersen and regulatory agencies by eliminating certain synthetic minor limits and allowing flexibility for most modifications under the facilitywide caps. In addition, flexibility from MPCA on the regulation of the diptanks will result in further cost savings. The parties believe that specific long- term cost savings and paperwork reduction will be realized in the areas of air permitting, streamlined Minnesota XL Permit compliance, combined reporting and record keeping, emergency response planning, and training integration.

Reward Limit Options. This project also tests the use of rewards as incentives for Andersen to achieve superior environmental performance. If Andersen's performance ratio decreases below the reward limit, as outlined in the FPA, Andersen will qualify for one of several different project-related rewards agreed to by MPCA and EPA, including the following.

- *Recognition*: For each period in which Andersen's performance ratio is below the reward limit, U.S. EPA and MPCA will provide a letter from high-ranking Agency officials describing Andersen's overall environmental performance, which Andersen can publicly distribute.
- *Addition of Mini-Projects:* For performance below the reward limit for more than three reporting periods, Andersen may present to MPCA and EPA other innovative projects that Andersen would like to include as part of this XL project.
- *Extension of the Project Duration:* For performance below the reward limit for 13 reporting periods or more, Andersen may request an extension of the duration of the current project. If Andersen chooses this reward, Andersen would have to demonstrate to EPA and MPCA that the extension is not only consistent with the goals of the current project, but also that the extension is consistent with EPA rules and policy concerning the duration of plantwide applicability limit permits.

Project Commitment Summary

Commitment	Status
Andersen Commitments	
Andersen will calculate a 5-year average performance ratio of pounds of VOCs emitted per volume of production.	To be calculated in late summer 2000 and included in the XL Permit.
Limit VOC emissions to 2,397 tons per year for entire Bayport Facility, with a subcap of 96 tons per year for the Andersen West Site.	To be completed in late summer 2000 and included in the XL Permit.
Combine the existing diptank VOC synthetic minor limits into a single rolling average limit of 1,573.9 tons per year.	To be completed in late summer 2000 and included in the XL Permit.

Commitment	Status
Andersen Commitments	
Limit nonmilling PM emissions for Bayport Facility to 209.1 tons per year, with a subcap of 96 tons per year (milling and nonmilling PM) for the Andersen West Site.	To be completed in late summer 2000 and included in the XL Permit.
Control all existing and future milling operations with BACT (currently believed to be baghouse filters), and meet all PSD requirements for PM and PM-10 emissions.	Pending.
Continue to control the door plant paintline emissions with a catalytic oxidizer until the company receives approval to discontinue the use of the control equipment from the MPCA.	Pending.
Ensure that any new or reconstructed paintline equipment does not emit at a rate greater than 4.5 pounds of VOCs per gallon of coating applied.	Pending.
Ensure that any new or reconstructed preservative application process does not emit VOCs at a rate greater than 2.0 pounds per gallon of preservative used.	Pending.
Conduct a health risk analysis for toxic air emissions.	Pending.
Continue to investigate the possibility of recycling windows as feedstock for the Fibrex composite process, and present its findings to EPA, the MPCA, Washington County and the CAC within 2 years of the effective date of the FPA.	Pending.
Attempt to cease operation of the west diptank within 5 years after the start of the project.	Pending.
Remove all hazardous waste from the west diptank within 90 days of permanent shutdown; remove all metal parts that have contacted the penta-containing wood preservative and recycle the material using a metal-smelting operation; provide verification acceptable to the MPCA that the parts were properly recycled.	Pending.
If the west diptank reservoir is eventually removed, Andersen will submit a plan to test the adjacent soils and address the sand fill material, the soil under the reservoir, and the reservoir itself.	Pending.

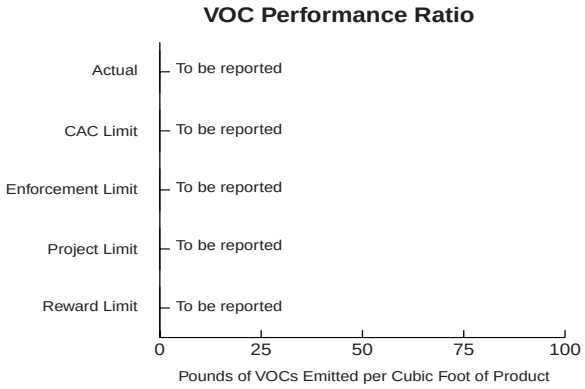
Commitment	Status
Andersen Commitments	
Evaluate and manage any waste generated from new preservative formulations at the diptanks in accordance with appropriate regulations.	Ongoing.
Continue to seek ways to enhance the existing groundwater remediation system.	In progress.
Continue to provide administrative support to the Andersen CAC that was established in 1997; continue outreach work with all stakeholders; give local residents a voice at CAC meetings.	In progress.
Operate pursuant to the facility's existing EMS; strive to meet the goals outlined in the Corporate Pollution Prevention Plan.	In progress.
Report the facility's compliance status to the CAC at least semiannually.	First semiannual report anticipated March 2001.
Prepare and submit to EPA, the MPCA, Washington County, and the CAC a status report at least annually; monitor VOC and PM emissions and make data available to public.	First annual report anticipated August 2001.
Complete an Environmental Assessment Worksheet as required under Minnesota environmental review regulations.	To be completed in spring 2000.
EPA Commitments	
EPA will issue a final rule providing regulatory flexibility for this Project XL pilot.	To be promulgated following the issuance of Minnesota XL Permit in late summer 2000.
Provide rewards, as outlined in the FPA, for superior environmental performance.	As needed.
MPCA Commitments	
Issue a Minnesota Project XL Permit allowing the project to commence.	To be issued in late summer 2000.
Grant Andersen approval to discontinue the use of a catalytic oxidizer, if Andersen meets commitments outlined in the FPA.	To be determined.
Review Andersen's Health Risk Analysis for toxic air emissions.	To be completed by late summer 2000.
Terminate Corrective Action Agreement, dated May 4, 1995, between the MPCA and Andersen.	To be terminated by late summer 2000.

Commitment	Status
MPCA Commitments	
Grant Andersen regulatory flexibility regarding the closure of the diptanks and management of removed metal components.	To be completed by late summer 2000.
Provide rewards, as outlined in the FPA, for superior environmental performance.	As needed.
Washington County Commitments	
Amend its hazardous waste management ordinance or take administrative action to allow this XL project to proceed.	To be completed by late summer 2000.

This table and the environmental performance section that follows summarize progress in meeting commitments described in the FPA for the Andersen XL project:

Environmental Performance

This section summarizes progress in meeting the environmental performance described in the FPA for Andersen's Bayport Facility. No information regarding performance measures is available at this time. Anticipated results will be reported as follows.



Volatile Organic Compounds (VOCs): Regarding VOC emissions, Andersen has agreed to report two unique parameters to confirm environmental performance: the performance ratio and the facilitywide VOC cap. The performance ratio is a measure based on VOCs emitted per standard measure of production, including a VOC emissions subcap at the Andersen West Site. On a per-period basis (13 periods per year) Andersen will calculate the ratio of pounds of VOCs emitted per cubic foot of product shipped (performance ratio) for the preceding 13 periods. That calculation will be compared to the CAC Limit, Enforcement Limit, Project Limit, and Reward Limit, all of which will be established by late summer 2000.

The *CAC Limit*, which is the average of the prior 5 years' performance ratios, is the main limit for evaluating Andersen's ongoing environmental performance and will be established in late summer 2000 using past performance data. It will be recalculated every 3 years.

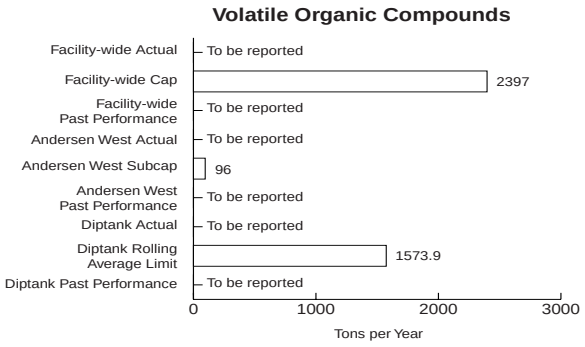
The *Enforcement Limit*, which is a static limit for the 10-year duration of the XL project, will be established in late summer 2000 utilizing the initial CAC Limit plus two standard deviations.

The *Project Limit* is an adjustable limit that will also be set at two standard deviations above the CAC Limit, but will be adjusted at the same time as the CAC Limit, every 3 years. If Andersen's performance ratio exceeds the Project Limit but is below the Enforcement Limit, the XL project will end unless Andersen demon-

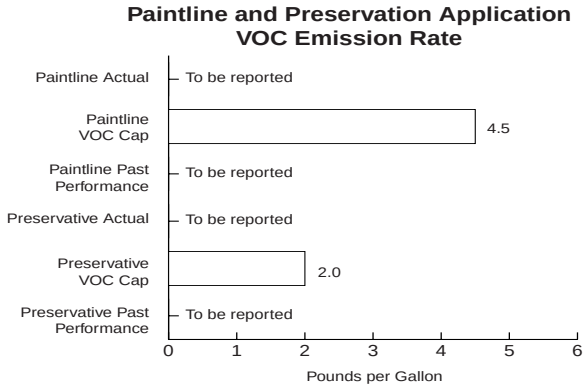
strates to the satisfaction of the CAC, EPA, and the MPCA, each acting in its independent capacity, why the project should continue.

The *Reward Limit* is set at two standard deviations below the CAC Limit. The Reward Limit will not increase and will only decline if Andersen remains below it for 3 consecutive years.

The second parameter for confirming environmental performance, referred to as the facilitywide VOC cap, is based on total VOC emissions from the Bayport Facility. The VOC cap for the Bayport Facility is set at 2,397 tons per year, with a subcap of 96 tons per year for the Andersen West Site. The existing VOC synthetic minor limits on the diptanks have been combined into a single rolling average limit of 1,573.9 tons per year.

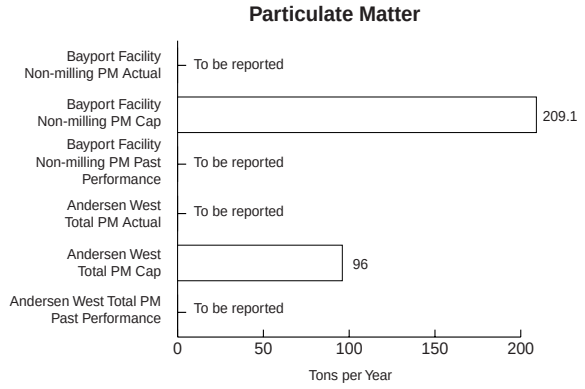


In addition, any new or reconstructed paintline shall not emit at a rate greater than 4.5 pounds of VOCs per gallon of coating applied, and any new or reconstructed preservation application processes shall not emit VOCs at a rate greater than 2.0 pounds per gallon of preservative used.



Progress: To be reported in first semiannual report.

Particulate Matter: The Minnesota XL Permit will include an enforceable cap for nonmilling PM emissions of 209.1 tons per year that will apply to the entire Bayport Facility. The Andersen West Site also will be subject to a separate limit for total PM (milling and nonmilling) of 96 tons per year.



Progress: To be reported in first semiannual report.

Diptank Closure: Andersen has two active diptanks used to apply solvent-based wood preservative to an array of different window and door parts and as backup equipment for inline waterborne preservative processes. Andersen will attempt to cease use of the west diptank within 5 years after the start of the XL project. This will result in a reduction of VOC emissions of approximately 180 tons per year, as well as a reduction in hazardous waste generation of 800 gallons per year.

Progress: Project goal (nonenforceable) to be completed by 2005.

Stakeholder Participation

The Andersen Community Advisory Committee (CAC) has been established and has functioned as the primary contact with the local community and other stakeholder groups. The CAC is composed of individuals representing a variety of stakeholders, including local residents, employees, businesses, environmental groups, and government. It is important to the success of the XL project that the CAC's role continues throughout the life of this project. The CAC is guided by the Stakeholder Involvement Plan attached to the FPA. Stakeholder

support has been built through 12 meetings of the CAC held from December 1997 through September 1998. CAC meetings initially covered detailed briefings on all aspects of the Andersen Project XL proposal. CAC involvement evolved into active questioning, comments, and participation by CAC members in FPA negotiations, and in the work groups established to address specific FPA issues. Andersen will report its compliance status to the CAC at least semiannually.

In addition, Andersen Corporation has kept local residents informed of Project XL initiatives through the *Andersen Community Update* newsletter, Internet postings, news media contacts, open houses, displays, and responses to community inquiries.

Six-Month Outlook

The key focus areas for continued successful implementation of the FPA over the next 6 months will be the following.

- MPCA's issuance of a Minnesota Project XL multi-media permit.
- EPA's promulgation of a final rule that will allow regulatory flexibility for this XL project.
- Washington County's amending of its hazardous waste management ordinance.
- Andersen Corporation's calculation of the performance ratio and implementation of the emissions caps.

Project Contacts

- Kirk Hogberg, Andersen Corporation, (651) 430-7437.
- Brian Barwick, EPA Region 5, (312) 886-6620.
- Nancy Birnbaum, EPA/XL HQ, (202) 260-2601.
- Andrew Ronchak, MPCA, (651) 296-3107.

Information Sources

The information source used to develop this progress report is the FPA for the Andersen Corporation XL Project, dated June 30, 1999. The information source is current through June 1999.

Glossary

Bag-house Filter Collectors: Vacuum-like systems used to collect sawdust generated by milling operations.

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

Best Available Control Technology (BACT): A case-by-case technology determination that considers energy, environmental, and economic impacts in determining the maximum achievable pollutant reduction.

Commentors: People or organizations with an interest in an XL project, but without the need to participate intensively in its development. The project development process should inform and be informed by commentors on a periodic basis. The views of informed commentors are a strong indicator of the broad potential for wider applicability of the innovations being tested in a project.

Community Advisory Committee (CAC): The body formed to assist Andersen Corporation in the development and implementation of its XL proposal. The CAC is made up of direct participants: individuals representing a

variety of stakeholders including local residents, employees, business, environmental groups, and government.

Criteria Air Pollutants: Currently, there are six criteria pollutants that are subject to National Ambient Air Quality Standards (NAAQS), which are regulations promulgated by EPA under the authority of the Clean Air Act (CAA). EPA has identified and set standards for six criteria air pollutants--particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO_2), nitrous oxides (NO_x), lead (Pb), and ozone (O_3)--that are known to be hazardous to human health.

Diptank: A piece of process equipment used to apply wood preservative to pallet loads of milled wood pieces. The process equipment consists of an open-top tank containing wood preservative and carriages that convey pallet loads of wood pieces into and out of the preservative solution.

Direct Participants: People or organizations representing a variety of stakeholders who work intensively with project sponsors to build a project from the ground up. For example, the CAC is made up of direct participants.

Emissions: Airborne discharges from sources such as industrial processes.

Emissions Cap: A provision designed to prevent projected growth in emissions of a specific contaminant established at a facility from exceeding a specified limit. Generally, such provisions require that emissions increases from one operation be offset by reductions at other facility operations under the same cap.

Environmental Management System (EMS): A comprehensive, documented program implemented by a company to promote compliance with environmental laws and promote environmental performance.

Environmental Protection Agency (EPA): The Federal government agency charged with implementing U. S. environmental laws and the sponsoring agency for XL projects.

Fibrex: Andersen Corporation's reclaimed wood/vinyl composite used in production of window and patio door components.

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.

General Public: The broad category of people and organizations who are not direct participants in the Project XL development process, but who have an interest in, and wish to be informed about, progress on the project.

Groundwater Remediation System: A system designed to remove groundwater contamination. Often, such systems use wells to recover contamination.

Hazardous Air Pollutants (HAPs): Air pollutants that are not covered by NAAQS but that may present a threat of adversely effecting human or environmental health.

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

Milling: Milling operations are those activities that involve the cutting and shaping (except by extrusion) of wood or Fibrex.

Minnesota Pollution Control Agency (MPCA): The regulatory agency charged with implementing environmental laws in the State of Minnesota.

Minnesota XL Permit: A permit issued under Minnesota Statute 114C authorizing a Project XL pilot in Minnesota and containing all Federally enforceable air permits.

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

New Source Review (NSR): The Federal regulatory program establishing preconstruction permitting requirements for certain facilities based on the potential emissions of the facility. The NSR, a program of the CAA, strives to ensure that potential new sources of air pollution take proper steps to minimize pollution levels.

Nonmilling: Nonmilling operations are those activities that generate PM emissions and that are not milling operations.

Particulate matter (PM): Fine liquid or solid particles, such as dust, found in air or emissions.

PM-10: Particulate matter with a diameter less than 10 microns.

Penta: Short for Pentachlorophenol.

Pentachlorophenol: A wood preservative compound that was once widely used.

Prevention of Significant Deterioration (PSD): The part of the NSR program in which state or Federal permits are required to restrict emissions for new or modified sources in locations where air quality already attains ambient air quality standards.

Project XL: A Federal program to conduct pilot projects that promote eXcellence and Leadership through negotiated agreements with regulated parties.

Regulatory Innovation: Efforts to seek more flexible or cost-effective means of attaining environmental performance results beyond compliance limits.

Regulatory Flexibility: The ability of a facility to make certain changes or undertake certain activities that may otherwise be subject to specific regulatory approval.

Resource Conservation and Recovery Act (RCRA): RCRA gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of nonhazardous wastes and underground storage tanks. RCRA focuses only on active and future facilities and does not address abandoned sites.

Reporting Period: An increment of time for summarizing business performance. Andersen Corporation operates with an accounting system based on 13 periods per year. The first period of the year is 3 weeks long, periods 2-12 are 4 weeks in duration and the thirteenth period is 5 weeks. Existing air emission permits require Andersen Corporation to summarize emissions each period.

Rolling Average Limit: An average determined once each specified time frequency, such as daily or monthly, for a specific time period, such as 30 days, 12 months, or 365 days. The average is calculated by summing all data points for the time period and dividing the total by the number of data points. A new rolling average is recalculated for each time frequency, unless specified otherwise in an applicable requirement or compliance document.

Solvent-based: Coatings that are primarily dissolved in volatile solvents, a process usually leading to VOC emissions.

Stakeholders: People and organizations with varying degrees of interest and involvement in a XL project. With XL projects, stakeholders are categorized into direct participants, commentors, and the general public.

Stakeholder Involvement Plan: The process for involving a variety of people and organizations in the development of a Project XL initiative.

Standard Deviation: A statistic used as a measure of the dispersion or variation in a distribution, equal to the square root of the arithmetic mean of the squares of the deviations from the arithmetic mean.

Superior Environmental Performance (SEP): An important requirement for Project XL. SEP is when a facility improves its performance in protecting the environment and human health compared to what the facility otherwise would have attained without Project XL.

Synthetic Minor Limit: A permit condition placing federally enforceable emission limits on a facility or modification that are lower than applicable major source or major modification permit thresholds.

Title V Air Permit: An operating permit required under Title V of the Federal Clean Air Act that consolidates all Federal air emissions requirements into one document.

Volatile Organic Compounds (VOCs): Any organic compound that evaporates easily into the atmosphere and that participates in atmospheric photochemical reactions, except for those compounds designated by the EPA Administrator as having negligible photochemical reactivity. VOCs are a precursor to the formation of the criteria air pollutant ozone, and as such, are subject to regulations under the NAAQS. VOCs also may be HAPs that are subject to regulation under the MACT standards.

Waterborne Preservative: A preservative formulation wherein water replaces solvent as the carrier for preservation agents which results in significantly lower VOC emissions on a per unit basis.