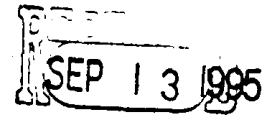


US EPA ARCHIVE DOCUMENT

September 8, 1995



Mr. Jon Kessler, XL Director
Office of Policy, Planning and Evaluation
Regulatory Reinvention Pilot Projects
U.S. Environmental Protection Agency
West Tower 1013, Mail Code 2111
401 M Street, S.W.
Washington D.C. 20460

Re: Project XL Proposal

Dear Mr. Kessler:

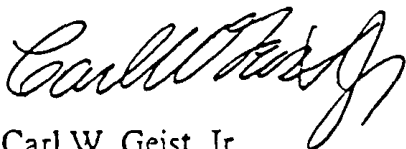
Enclosed for EPA's consideration is Weyerhaeuser Company's proposal to participate in Project XL at its Flint River Operations facility in Georgia. This proposal clearly meets EPA criteria for acceptance and we look forward to your consideration of this proposal.

Weyerhaeuser's Flint River Operations is a state-of-the-art bleached kraft pulp manufacturing facility. This proposal incorporates Weyerhaeuser's commitment to minimum impact manufacturing (MIM) as an alternative and innovative regulatory strategy. We believe our MIM approach will achieve superior environmental results and can demonstrate that achievement. We are hopeful that Project XL will provide our Flint River Operations with the necessary regulatory flexibility to stay competitive in the global marketplace in which we operate.

We are prepared to present to EPA more detailed information about the environmental performance of this facility as well as our vision of this facility as a minimum impact manufacturing facility. Also, please feel free to contact Mr. Harold Reheis, Director of the Georgia Environmental Protection Division and Mr. Robert Kerr, Director of the Georgia Pollution Prevention Assistance Division for additional information about this facility.

If you have any further questions, please contact me at 206-924-2484, or Sara Schreiner Kendall, Director of Environmental Affairs for the pulp, paper and packaging businesses at Weyerhaeuser at 206-924-3290.

Sincerely,



Carl W. Geist, Jr.
Vice President
Pulp Business

PROJECT XL
REGULATORY REINVENTION PILOT PROJECT PROPOSAL
WEYERHAEUSER PULP PAPER & PACKAGING
FLINT RIVER OPERATIONS, GEORGIA

INTRODUCTION

Weyerhaeuser Company is one of the world's largest forest products companies. The Company manufactures pulp, paper, and wood products primarily from its 5.6 million acres of timberlands located across the United States and 14 million acres under license in Canada. We operate more than 100 manufacturing facilities and employ more than 37,000 people throughout the United States and Canada. Weyerhaeuser has been a leader in the forest products business since its inception in 1900. Environmental protection is an integral part of our business, and our environmental policies and practices reflect the concerns and interests of our customers, suppliers, employees, shareholders and local communities. We are always searching for ways to improve as a responsible steward of the environment. Weyerhaeuser's vision is to be the best forest products company in the world. Environmental responsibility is a key component of Weyerhaeuser's ability to achieve that goal.

The Weyerhaeuser Flint River Operations is a state-of-the-art bleached kraft pulp manufacturing facility producing 320,000 tons per year of absorbent fluff pulp. This facility, located in Oglethorpe, Georgia, has been part of the business community in Georgia since 1980. This facility has approximately 500 employees and an annual economic contribution of over \$75 million in Georgia. As with other Weyerhaeuser pulp, paper, and packaging facilities, Flint River Operations' long-term environmental vision is the continuous improvement of processes that will achieve a minimum impact on the environment.

Flint River Operations' environmental performance has been recognized globally as one of the best in the bleached kraft pulping industry. This world class environmental performance is a result of the original facility design and the on-going commitment to maintain a leadership position as a state-of-the-art environmental performer.

Flint River was the first bleached kraft pulp facility to employ commercially viable, advanced technology that minimizes adverse impacts on the environment including: utilizing oxygen delignification technology (1980), eliminating use of elemental chlorine with 100% chlorine dioxide substitution in bleaching (1989), and incorporating extensive water conservation practices such that this facility uses, on average, one-third the volume of water compared to a typical industry facility. Due to its sustained superior environmental performance, Flint River Operations has been extensively used by the U.S. Environmental Protection Agency as a benchmark facility for setting the Cluster Rule effluent guidelines and liquor best management practices (BMPs).

Flint River Operations is continuing its pursuit of pollution prevention projects that enhance shareholder value while reducing the facility's overall impact on the environment and reducing the consumption of natural resources. Current improvement plans will move the facility closer to attaining a bleach plant effluent-free (BEF) status.

PROJECT DESCRIPTION

Weyerhaeuser has committed to Minimum Impact Manufacturing (MIM) as an environmental and business strategy for its facilities. Under the auspices of Project XL, Weyerhaeuser proposes that the Flint River Operations develop and implement the Minimum Impact Mill approach as an alternative regulatory strategy. The Minimum Impact Mill concept can be conceptualized, in essence, as an environmental "bubble," around the entire facility, encompassing below- as well as above-ground impacts to multiple environmental media. The intent behind a Minimum Impact Mill is to have the boundaries of the "bubble" around the facility shrink over time as the multi-media impacts are reduced through process improvements, better environmental management systems, pollution prevention techniques and emerging technology.

Under the Minimum Impact Mill approach, the facility would identify specific multi-media performance targets, which, collectively, would greatly exceed existing legal and regulatory requirements.

A corresponding timeline would be identified for achieving those targets. Such performance targets could include, for example, reductions in: total mill water usage, effluent parameters including BOD, COD, Color, TSS, AOX, total reduced sulfur emissions (TRS), bleach plant effluent flow, total solid waste generation, total hazardous waste generation, hazardous air pollutants (HAP's) emissions, energy usage, and facility odor emissions.

In establishing these performance targets, Flint River's approach would encompass an environmental management system, with corresponding compliance assurance performance measurements, incorporating an ISO 14000 type of format. While the ISO 14000 guidelines on environmental management systems will not be final until mid-1996, there is a sufficient body of work completed to date that Flint River would draw upon to identify an appropriate environmental management system. Flint River anticipates seeking certification under ISO 14000 once the guidelines are implemented.

Regulatory flexibility provided through Project XL would provide for enhancing the facility's ability to respond to changing business conditions, primarily market and customer demands. Flint River seeks to enhance its ability to adapt to and manage change as well as gain stability in projecting future environmental requirements. Examples of this flexibility include: fast track permit modification to allow faster response to customer, market or environmental needs, automatic permit renewals or extended permit terms to provide security for evaluating business strategies and options, reduced regulatory inspections, and consolidated, stream-lined reporting obligations.

Regulatory flexibility is essential for maximizing the position of American business in the global marketplace. Flint River competes for customers in an international market. The key to maintaining a strong competitive position is the ability to respond quickly to customer and market demands. This is the opportunity the Flint River Operations seeks through the regulatory flexibility provided by Project XL.

I. ENVIRONMENTAL RESULTS

Flint River's Minimum Impact Mill approach will attain superior environmental results that exceed those achieved by current laws or regulations. The Minimum Impact Mill approach is predicated on reducing impacts to the environment across multiple environmental media. Current regulatory requirements focus on discrete environmental media and have limited ability to achieve a net overall reduction of impacts to the environment. In fact, achievements in one environmental medium frequently come at the expense of another medium. The MIM approach addresses the facility's impacts in a holistic manner, recognizing that the facility must take a system approach to environmental management. The environmental management system will be able to take into account the specific requirements of the ecosystem surrounding the facility. For example, the facility has utilized an effluent holding pond management system to address the particular requirements of the Flint River. The Minimum Impact Mill approach is consistent with the direction being developed under ISO 14000 proposal for environmental management systems and will form the foundation for environmental performance well into the twenty-first century.

Some of the expected "beyond compliance" results that could be achieved include: reduced bleach plant effluent and correspondingly reduced total effluent discharged, reduced amounts of discharged effluent parameters such as AOX, color, BOD and COD, reduced TRS emissions and corresponding odors associated with such emissions, reduced hazardous air pollution emissions, reduced generated solid wastes and landfilled material, reduced generated hazardous wastes, reduced water usage, greater chemical recycling and recovery of process chemicals used.

Another innovative result that will be achieved with the MIM approach is movement toward a change in the current regulatory paradigm. The MIM approach relies on a "partnership" relationship. Greater compliance will be achieved at a substantially less cost to the Company and the state regulatory agencies by focusing on a partnership approach to compliance.

II. COST SAVINGS/PAPERWORK REDUCTION

This proposal will result in substantial cost savings and paperwork reduction in several ways. First, and perhaps most importantly, the regulatory flexibility provided in this proposal would eliminate the need for facility and state agency personnel to devote unnecessary and duplicative time in routine permit modifications, providing cost savings to both the Company and Georgia's Environmental Protection Division. For example, once the MIM "bubble" parameters have been established, regulatory flexibility under PSD and Title V would be available to all changes in mill operations or plant processes that occur within the MIM "bubble," thus avoiding costs that are largely paperwork exercises that do not truly benefit the environment.

Secondly, consolidating and streamlining reporting obligations would place all reporting obligations on the same cycle, producing greater efficiencies and cost savings in the mill for meeting its reporting obligations. Finally, monitoring options may eliminate the need for certain reporting obligations, thus reducing paperwork.

Additionally important, significant economies will be realized when the facility can, while operating within its Minimum Impact Mill limits, respond faster to changing customer, environmental, market or global competitive conditions. This is critical for operating in a global environment, as Flint River does, where we must balance ecological, social, customer and economic needs for financial and market success while providing incomes for our employees, shareholders and communities in which we operate.

III. STAKEHOLDER SUPPORT

The Flint River proposal has strong stakeholder support. The proposal has been reviewed and received committed resources from the Directors of the Georgia Environmental Protection Division (Mr. Harold Reheis) and the Georgia Pollution Prevention Assistance Division (Mr. Robert Kerr). These state agencies concur that this proposal would ease the regulatory paperwork burden on a facility, and maximize the cross-learning opportunities, while enhancing environmental protection.

A local supporting and committed stakeholder of this proposal is Lake Blackshear Watershed Association, an environmental organization managing the long-term health of the Flint River and Lake Blackshear in the middle Georgia region. This association comprises members from the general public, five counties in the middle Georgia region, Georgia Southwestern College, Crisp County Power Commission, and representatives from the Department of Natural Resources - Game and Fish Division. This valuable stakeholder will be an integral part of this project's success.

IV. INNOVATION/MULTI-MEDIA POLLUTION PREVENTION

The Flint River Minimum Impact Mill proposal is innovative in that the multi-media environmental impacts from the entire operation will be addressed at the same time, rather than the medium-by-medium piecemeal approach under current laws and regulation. The strategy will focus on setting multi-media parameters while recognizing the impact on other environmental media from making reductions in one medium. All too frequently, environmental regulations result in transferring pollution loads from one medium to another. The MIM approach recognizes the interrelationship of environmental impacts and will address these impacts holistically. One of the primary ways that Flint River will achieve its MIM goals will be through pollution prevention measures.

For example, a recent process modification to the digester process will increase pulp production efficiency and product quality at the same time it will reduce costs and enhance environmental benefits. Those environmental and economic benefits include: increased pulping digester capacity and efficiency, increased wood yield thus conserving natural resources, decreased bleaching chemical usage and costs, reduced water usage, significantly reduced BOD, COD, and color effluent loads, and elimination of certain solid waste streams, reducing costs and demands for landfill space.

The MIM targets will be dependent on understanding and implementing effective pollution prevention measures. Flint River Operations does not intend to rely only on capital-intensive end-of-the-pipe control technology, although such technology does play a role. As a more efficient long-term solution, the MIM approach will focus on management practices and process improvements that prevent pollution in the first place.

The MIM approach itself is innovative. Instead of a single-medium focus, the MIM "bubble" will take into consideration multiple environmental media and impacts and address their interrelationship. This approach is consistent with the environmental management system under development by the International Standards Organization's ISO 14000 effort. Project XL will enable the Flint River Operations to merge its Minimum Impact Mill environmental management system with its regulatory requirement for enhanced efficiencies and environmental benefits.

V. TRANSFERABILITY

The Flint River MIM proposal will be immediately transferable in at least two ways. The environmental results achieved would be transferable to other pulp and paper facilities in the United States. Achieving many of the goals inherent in a Minimum Impact Mill will require testing emerging technologies and process improvement research. These learnings will be applicable to other pulp and paper facilities through future cycles of NPDES and MACT permitting. The industry has a long history of sharing key learnings through trade associations and research organizations such as the National Council for Air and Stream Improvement. This knowledge will also be transferable to any large manufacturing facility that uses large quantities of air and water resources in its processes and directly discharges pollutants.

Secondly, the MIM regulatory approach will be transferable to any regulated entity. A multi-media, performance-based approach has the advantage of ensuring that all environmental impacts are considered. Regulatory requirements in one medium may not produce the best net benefit to the environment. Other media impacts also need to be considered.

Under the MIM approach, we may conclude that a certain reduction in pollution is not possible to achieve until another affected impact is addressed. Specific needs of ecosystems may be better addressed using a MIM approach.

Importantly, Flint River anticipates that many of the MIM improvements will come through pollution prevention measures and improved manufacturing management practices. These improvement measures are better understood when tested and utilized in an applied setting. Achieving MIM targets through management improvements and pollution prevention measures rather than relying solely on the deployment of capital-intensive end-of-the-pipe control technology will enhance the transferability of the knowledge derived from the Flint River MIM project. Weyerhaeuser anticipates these learnings to be communicated through various workshops and seminars. Examples include workshops conducted by NCASI and the American Forest & Paper Association as well as state and federal regulatory seminars.

VI. FEASIBILITY

With state and EPA support, the proposal is feasible from a regulatory standpoint. The identification of Minimum Impact Mill targets will incorporate existing permitting requirements.

Flint River Operations is financially capable of making a commitment to this Minimum Impact Mill approach. Mr. Jack Creighton, Weyerhaeuser's President and CEO, fully supports Flint River entering into this cooperative relationship with the EPA and Georgia's EPD to implement the facility's MIM strategy.

Some MIM performance targets can be fully implemented in the near term. Some may require a time period before they are accomplished. While some of the technical goals may not be completely feasible at this point in time (for example, a BEF operation) Weyerhaeuser expects that focusing on applied research in the context of a fully operational facility will foster the technical feasibility of even the most ambitious performance targets.

VII. MONITORING, REPORTING AND EVALUATION

Flint River Operations will work with Georgia's Environmental Protection Division to identify performance targets including, but not necessarily limited to, the following areas of environmental impact: air emissions, water usage, effluent discharges, solid and hazardous waste generation, and pollution prevention. The performance targets will recognize trade-offs between media and will seek an overall reduction of the facility's environmental impact.

Flint River recognizes that compliance assurance is an important component of verifying and validating an XL project. Together with the state and the EPA, Flint River will identify mechanisms to streamline reporting obligations and ensure that performance data is communicated to the state in a timely fashion so that the state can verify the facility's compliance status.

This effort will recognize and incorporate the Company's ongoing compliance assurance efforts which include, for example, regular internal environmental auditing, use of an environmental risk assessment diagnostic, periodic focused education and training, and communications on environmental issues. Additionally, the performance targets will ensure Flint River's compliance with Company environmental policies that require certain standards to be met at its mills, for example: "PC 3-free" equipment and no underground storage tanks.

VIII. SHIFTING OF RISK BURDEN

The Flint River XL proposal will not result in the transfer of risks from environmental contamination. The Minimum Impact Mill approach seeks to reduce or eliminate environmental impacts to all media. Achieving the MIM objectives will reduce the consequences of environmental contamination from the operation of this facility. Thus, all at risk populations will benefit from the implementation of this proposal.