

Weyerhaeuser-Flint River Operations Explores Methods to Reduce Water Usage

Introduction

Water use is quickly becoming a major concern for industries throughout the state. In addition to the growing number of water-related regulations with which a company must contend, recent drought conditions have brought water conservation issues into sharp focus and raised community concerns regarding discharges into local rivers and lakes. Weyerhaeuser-Flint River Operations (Flint River), a pulp and paper mill located in Oglethorpe, Georgia, has recognized that the best way to address these water related issues is to place a high priority on water use reduction.

Flint River continues to be recognized as an environmental leader in the Pulp and Paper industry. In May 2000, the Georgia Chamber of Commerce recognized the plant with an Environmental Leadership Award in the Water Quality category. Flint River is a participant in the USEPA Project XL (eXcellence and Leadership) program and is committed to a vision of being a Minimum Impact Manufacturing (MIM) facility.

Water Reduction Methods

The following are some of the methods used by Flint River to meet their water reduction goals:

1. Formed a water reduction team that raised the awareness level of employees regarding water conservation. Team has discussed implementation of several projects to permanently lower water usage.
2. Eliminated the need to add fresh mill water in the paper machine wire pit when producing a higher brightness grade.



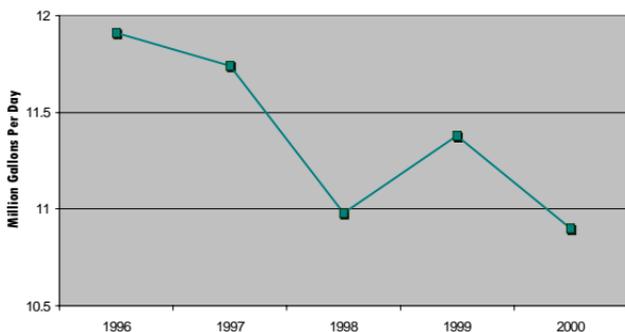
3. Placed a flow measurement device and control valve in the water pipeline going to the wire pit for continuous monitoring.
4. Resized and replaced several shower nozzles in the woodyard operation with smaller nozzles.

5. Installed an automatic shutoff valve in the woodyard operation so that when this area of the plant is not in operation, the flow to the nozzles is turned off.
6. Installed recovery systems to re-circulate cooling water for turbine generator gland seals.
7. Approved capital funds to reclaim and reuse cooling water that passes through the bearings of several large fans in the boiler area.
8. Instituted a repair and replacement system to reduce water loses from valve leaks and steam traps.

Results

During the first six months of 2000, water use at Flint River dropped by approximately 500,000 gallons per day. The project to reclaim cooling water used in the boiler area fans is expected to reduce water usage by about another 500,000 gallons per day. If all identified water conservation projects are completed, the future water usage will be approximately 7.5 million gallons per day (MGD), which represents an overall reduction of 4 MGD from baseline usage. Steps have been taken to initiate the more restrictive water usage limits in the Flint River surface withdrawal permit so that the maximum 24-hour withdrawal and the not-to-exceed monthly average are reduced by 1 MGD respectively.

**Weyerhaeuser Flint River Operations
Water Usage History**



Pollution Prevention Assistance Division

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