

Georgia-Pacific Toledo Mill Approximate Historical Timeline

- 1957 – GP Builds Toledo Paper Mill
 - No. 1 Paper Machine, No. 1 Recovery Boiler, No. 1 Lime Kiln, No. 1 Kraft Digester Line, No. 1 Power Boiler & No. 3 Hog Fuel Boiler
 - The Mill started up with one, 16” carbon steel, effluent pipeline from the mill in Toledo to Nye Beach in Newport. The pipeline routing was similar to the current pipe routing but diverged from Hwy 20 at John Nye Road and traveled along the North Bay Road until John Moore Road where the line traveled back up to Hwy 20. Pumping capacity was 4.4 MMGD.
 - Final outfall of pipeline was located 1075 feet out from high tide, which placed it 0.5 to 1 feet below the surface at low tide.
 - Treatment System was a simple “overflow lagoon” system to provide surge capacity and handle pumping capacity shortcomings.
- 1959 – An additional 18” concrete cylinder pipe was installed from the Mill to the Hwy 20 and Harney Street intersection in Newport. The new pipeline did not follow the North Bay Road divergence. Both lines were tied together at the valve station at the Hwy 20, Harney Street intersection.
- 1960 – Mill Expansion
 - No. 2 Paper Machine, No. 2 Recovery Boiler, No. 2 Lime Kiln & No. 2 Kraft Digester Line
- 1963 – Mill Expansion
 - Bag Plant, No. 3 Recovery Boiler, No. 3 Lime Kiln, No. 3 Kraft Digester Line & No. 4 Hog Fuel Boiler
- 1963 – A 21” concrete cylinder pipe was installed from the Mill to the intersection of 3rd and Brook streets in Newport. The original 16” line was disconnected and abandoned in place.
- 1964 – The ocean outfall line was extended to its current length (3890 feet from low-tide) and equipped with the Y-shaped diffuser.
- 1968 – Upgrade from “Overflow Lagoon” to Wastewater Treatment System
 - Pulp Mill Sewer – Screens followed by an aeration pond, Load Leveling Lagoon with 8, 40-hp aerators, which flowed to a settling pond with some aeration (3, 40-hp aerators).
 - Paper Mill Sewer – Installed 70-foot primary clarifier which discharged to the Thermal Pond (2 ponds) for cooling.
 - Reausticizing Plant Sewer – Discharge to the Thermal Lagoons.
 - Combined flow from the Thermal Lagoons and the Settling Lagoon comprised the final effluent.
- 1973 – Paper Mill Expansion
 - No. 3 Paper Machine and Semi-Chemical Continuous Hardwood Digester System
- 1976 – Mill Upgrades, including major upgrade to the wastewater treatment system:

- Thermal Lagoon expanded to a 3-pond system and the Reausticizing Plant Sewer and the Paper Mill Clarifier where routed to the first lagoon.
- Discharge of Thermal Lagoon routed to the inlet of the Load Leveling Lagoon.
- New pulp mill sewer screening system (Side Hill Screens) installed
- Supplemental Nutrient Addition System installed at the inlet of the Load Leveling Lagoon.
- Three, 75-hp, additional aerators installed in Load Leveling Lagoon
- Created the 90-MMG Treatment Lagoon with mid-feather dike and 12, 75-hp surface aerators that received the effluent from the Load Leveling Lagoon. The Treatment Lagoon discharge was routed to the Settling Lagoon.
- Installed infrastructure to reclaim up to 2 MMGD of effluent for use within the mill.
- 1981 – Installed 160-foot Primary Clarifier
 - Improved primary solids removal
- 1983 – An additional 21” concrete cylinder pipe was installed from Hwy 20 and Harney Street intersection in Newport. This pipe joined the existing 21” pipe in Newport at the intersection of 3rd and Brook streets.
- 1986 – The piping from the intersection of 3rd and Brook streets in Newport to the top of the bluff above Nye Beach was replaced with 21” concrete cylinder pipe.
- 1995 – Additional aeration added to the wastewater treatment system: 8 aerators in Thermal Lagoon, and 5 aerators in Treatment Lagoon.
- 1998 – Installed Foul Condensate Collection System
 - Improved treatment system odor and BOD treatment efficiency
- 2000 – 2.1 miles of the 18” pipeline were replaced with 24” concrete cylinder pipe from the Christiansen Valve Station to the Fruitvale Valve Station.
- 2003 – Mill Water Use Reduction Teams
 - Increased utilization of treated effluent within the mill.
 - Installed White Water Reuse Tank that increased water reclaim by 0.5 MMGD thereby decreasing discharge by same.
- 2004 – Installed “slip liner” in outfall line.
- 2005 – Installed oxygen injection system
 - Eliminated sulfate reduction in Primary Clarifier thereby reducing odor from treatment system.
- 2006 – 2.0 miles of 21” pipeline were replaced with 24” concrete cylinder pipe from the Mill to the Christiansen Valve Station.
- 2008 – 0.6 miles of 18” pipeline were replaced with 24” concrete cylinder pipe from the Fruitvale Valve Station to the Booster Pump Station.
- 2008 – 2.1 miles of 18” pipeline were replaced with 24” concrete cylinder pipe from the Booster Pump station to Hwy 20 and Harney Street intersection in Newport.