Spill Containment:

Description:
Four locations have been identified at the Powerhouse and Fiberline that need additional modifications to help prevent black liquor from entering the wastewater treatment system and causing impairments. The locations are No. 9 Sewer, No. 10 Sewer, Tile Tank Black Liquor Storage, and the Fiberline West (formerly Acid) Sewer. The rationale is to implement means to collect and pump back liquor losses to collecting tanks for minor and moderate releases and mitigate impacts from major releases by pumping process releases back into the process vessels.

Presently, there are no means for collecting and pumping liquor releases of up to a nominal 400 gpm from key areas in the mill which presents elevated exposure risks to the Wastewater Treatment System. Liquor releases are a result of gasket, packing and seal leaks, minor piping failures, and rapid unplanned shutdowns to major process equipment. Characteristics of the releases are high BOD, elevated conductivity (e.g. alkali loss) and a tendency to cause foaming issues in the ASB.

The project will capture four (4) sources in the Powerhouse and Fiber Line: Tile Tank area, No.9 Sewer, No. 10 Sewer, and Fiber Line West (formerly Acid) sewer. Completion of this project will mitigate risk from highest potential locations and help ensure that Black Liquor will not get into the mill's Wastewater Treatment System. These modifications will support protections to the existing and future modifications to the WWTS at the Catawba Mill.

To mitigate releases to the balance of the wastewater treatment system, sumps will be constructed at the No. 9, No. 10, and Tile Tank locations. Each location is being designed to accommodate nominal 400 gpm liquor releases. A vertical chopper-type sump pump will be installed at each point of collect. Releases to the No. 9 and No. 10 sewer sumps will be directed to the Weak Black and Spare Liquor Tanks. Releases to the Tile Tank Sump will go to back to either the North or South Liquor Tanks. Releases to the Fiberline West (Acid) Sewer will be directed to the spill collection tank; special provisions will need to be made in this location due to the use of acid for pH control and preventing low pH effluent from being put back into the process. A new conductivity probe will be installed at the Tile Tank sump; existing probes will be at the other locations. Contact level switches will be installed at each location for pump start/stop and alarming in the respective area DCS.