XL 2 Technical Meeting
Maine DEP Office - Room LW-2
Augusta, Maine
March 28, 2001

Attendees: Phil Sekerak, Jeff Pike, Rich Mason, Curt Treadwell, John Cronin, Joe Genco, Adriaan van Heiningen, Sterling Pierce, Chris Rasher, by phone: Mark Perez

Fiber Loss Project Update: John Cronin reviewed mill's 2001 emphasis on fiber loss. The mill has found several sewer weirs and flumes that need maintenance, replacement.

Mill currently samples 9 mill sewers, 5 Paper Mill samples and 4 Pulp / Groundwood samples.

The mill has historically looked at fiber loss trends, not focusing on absolute data values.

Current losses range from 25 – 100 tons fiber loss/day, with 60% – 80% of the losses coming from the Paper mill. Initial reviews of the facility design indicates that approximately 20 TPD of fiber is designed as system purges, etc.

The mill will focus on all of the mill flumes and weirs, Kleinschmidt consultants will perform assessments during the mill's May shutdown. This effort is taking place outside of the XL2 effort.

Fiber Loss goals /timing: Initial review led the mill to define: 30% reduction in fiber loss by 4th quarter , following improved measurement systems installed and calibrated during the May, total mill outage.

Toxicity: The mill just completed the annual toxicity tests for the facility. For the first time the final mill effluent chronic, LC 50 water flee test result was > 100%. Acheron Lab of Newport, Maine will be invited to the Collaborative Team Meeting on April 18th to review the toxicity test method.

> **Action**: Call made to Acheron: Question: Are the COD samples filtered prior to the test? Answer: COD tests are not filtered, but homogenized (blended) prior to the test.

The group discussed filtered vs. unfiltered COD testing. Should the XL2 Team investigate filtered COD testing to 'better' simulate the effect of Andro's treatment system. (settling in the clarifyers, etc.) ? The group felt that changing COD measurement techniques mid-stream during this project may confuse the effort; however, a small scale

trial of COD / filtered (or settled) COD may be valuable to understand the final effect of the XL2 project on mill effluent.
NEED to review the NCASI study on this subject – Biotreatability of COD from process areas at a Bleached Kraft mill. Roland Arsenault, Mead / Sarah Brezniak, NCASI 1997 Envir Conf. & Exib /899

Action: Chris Rasher to make copies for the group and distribute.

Improved Washing:

	COD mg/l		
	1/98	1/01	
"A" Decker #1	2741	461	
"A" Decker #2	3890	537	Major improvements in process over the years.
"B" Decker	5315	1431	Diffuser operation issue found & fixed in 1998. Another Diffuser operational 1999. Improvement was made in February, 2001 related to a mechanical problem at the base of the Diffuser.

- ***Liquor Separator: Item 7-A,2***

The team has chosen to move on with Shutdown Tie-ins for a liquor separtor for the "A" Digester flash steam system. This has the opportunity to remove 3-4 gpm of weak black liquor from the sewer. The shutdown tie-ins include large piping tees and blanks that can only be made during an annual shutdown. The XL2 – Technical Team has unanimously voted to approve these tie-ins. A decision needed to be made on this item prior to the April, XL - Collaborative Team meeting in order to coordinate the work during the May shutdown.

Action: Curt to call Subhash about metallurgy.

Steve Groves joined the meeting just after lunch and reviewed the potential for Andro to expand the scope of the XL2 Project to include a turpentine recovery project.
Background: The facility is considering installing a Peroxide Bleaching system in our Groundwood Mill. This system would add APPROXIMATELY 7000# BOD / day to the treatment load. One method of treatment would be to add 8 new aerators and a necessary new MCC room, at a cost of over $500,000 and annual operational costs of >$100,000. These costs will need to be included in the GWD Peroxide project, in order to meet water quality limits. An alternative to this may be to work with the XL2 effort. If the $500,000 + was allocated to the XL2 Team, the team could expand the project scope to include a Turpentine recovery system at Andro, reducing the ESTIMATED BOD load to waste treatment by approximately 15,000 #/day.

Sewer Monitoring: Mill must identify sewers to install conductivity signals and then develop a cost estimate for completing a sewer monitoring system.

Steve Groves has recently been promoted to a new Corporate position as Sr. Project Manager of Environmental Initiatives. Steve will continue to be located at Andro but will be involved with environmental opportunities throughout the corporation. He will be acting in a supportive role for Andro's XL2 project, but will be less directly involved in this one project. The team felt that John Cronin, of International Paper's environmental department, will become more involved in the XL2 project. John's understanding of environmental policy and Andro's waste water treatment operation will be an asset to the team's effort in pollution prevention.

Collaborative Team Meeting – Proposed Agenda 4/18/01

Topics:

- Toxicity testing: presentation by Acheron Lab, Newport

- Tappi short course attendance. Team to decide attendee.

- Test Results:
    - Baseline COD/Color
    - Washing Carryover
    - Toxicity
- Fiber loss Team update
- Project Status Update – including budget/spending update
    - 3,5,7, 10,
- Other Projects (outside XL2 Scope?)
    - Knots
    - Turpentine potential project
    - Screens, Decker, Hot water pump
    - O_2 Delignification Optimization
    - Kappa Analyzer
- Project Master Schedule Review – Chris Rasher will prepare 2-3 slides.

Next XL2 Technical meeting:

Tentatively scheduled for May 23rd
EPA, Region 1 - Boston