



**Daily Report for Allenstown, NH
Pilot project – Screening Sludge**

Date: February 16 - 23, 2010

Site: Allenstown, NH.

Equipment: RS 4024-40 with 2.5mm & 1mm Perforated Drum

Sludge: Return sludge 2.5 - 3% TS, Q max 70 gpm

Sludge Temp: 9 - 11°C

Drum RPM: 14 rpm – controlled with VFD

Feb 17 – 8:30am: putting in operation the installation that was mounted by Cambridge Water technicians, on top of the return sludge channel at the Allenstown, NH WWTP.

2.5mm perforated drum

Feed rate at about 30 gpm with a 1.5” pipe feeding the screen.

Spray wash water set at 2 min off and 2 min on.

Screen operated all day very good with no problems. Screenings collected look fairly free of sludge.

Feb 18 changed feed pipe to 2” and increase flow rate to 60 – 70 gpm.

Spray wash water set at 1 min off and 2 min on.

Screen operated all day with excellent results with no overflowing. Screenings collected are fairly free of sludge.

Peak flow for the screen with this type of sludge at 3% TSS is 70 gpm.

Feb 19: Continued test at flow rates between 60 – 70 gpm.

Spray wash water set at 1 min off and 2 min on.

Screen operated all day with excellent results. Screenings collected are fairly free of sludge.

Feb 22: Switched to 1mm drum.

Flow rate at 30 gpm

Spray wash water set at 1 min off and 2 min on.

Screen operated all day with excellent results. Screenings collected are fairly free of sludge.

Feb 23: Stay with 1mm drum.

Flow rate at 30 gpm

Spray wash water set at 1 min off and 2 min on.

Screen operated all day with excellent results. Screenings collected are fairly free of sludge.



Conclusion with Allenstown, NH sludge at 2.5 – 3% TSS:

1. The test drum with 6 degrees inclination ran for 24 hours with spray wash set at 1 min off and 2 min on. Wash water consumption is 5 gpm when spray wash valve is open. Drum rpm best at 14 rpm.
2. Test confirm a Model 51 with a 2.5mm drum will have a peak flow rate of 195 gpm at 3 – 5 % TSS
3. Test confirm a Model 55 with a 2.5mm drum will have a peak flow rate of 290 gpm at 3 – 5 % TSS

Site Technician:

Jeff Pearce