



Reducing Solids in Potato Flume Water

The facility was paying to have their water hauled off site as a means of disposal. The facility was using an average of 20,000 gallons/day of fresh water to operate the flume system used to transport the potatoes from the dry storage sheds to the processing room. The flume sump would fill up with solids and required weekly cleaning. The settle dirt and organic material created a bad odor and an increased chlorine demand at the final sprays prior to packing.



Mix Tank & Screen

Using a mixing tank with the addition of Floccin-I and a rotary screen, the facility removes solids from the system before the solids have a chance to build up. The treated water is then ozonated and returned to the sump.

The equipment manufactured by Integrated Engineers includes a centralized PLC control system, variable speed control of the mixing motor and screen rotating speed, timed spray

bars that reuse the flume water to keep the screen clear, and a suspended solids control system that monitors the effluent and changes the Floccin dosage to optimize the Floccin dosage rate.



Analytical Results:

	Influent	Post Screen	Post Filter	Reduction	Permitted Level
BOD	233	85.5	20.8	91.1 %	45
TSS	18,344	660	30.4	99.8 %	45