Paper Mill Bleach Plant

Date: 2011

Country: USA Distributor: Hydroflow Holdings USA

Keywords: Limescale, Paper, Factory, Spray

Filename: CaseStudy Paper Mill Bleach Plant 20110801.pdf

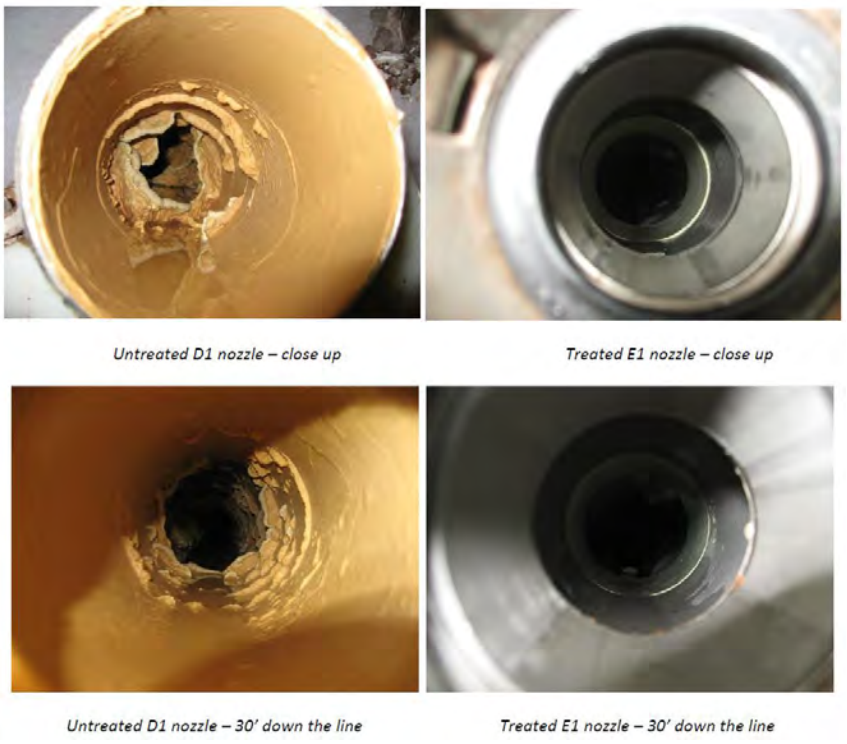

Figure 67 The inside of the pipe on the untreated (left) and treated (right) shower unit.

This is a study showing how HydroFLOW protected the shower nozzles and pipes in a paper factory's bleach plant shower room. Two units were compared -one with treatment, one without. The units were cleaned initially and left for 11 weeks, after which time the limescale build-up was examined. The E1 shower unit was treated with a single HydroFLOW Custom 8" unit. The pictures show the difference very clearly. There is significant build-up in the untreated pipe on the left, but the treated pipe remains clear after the 11 weeks of the trial.

Reference available.

WAPATO MUNICIPAL SWIMMING POOL

Date: 2011

Country: USA Distributor: HydroFLOW Holdings USA; MBI Water Solutions

Keywords: Swimming pool, Chlorine, Backwash

Filename: CaseStudy Wapato Pool.pdf

This installation was on a 375,000 gallon municipal swimming pool owned by Yakama Nation Youth Activities, Toppenish, Washington USA. The customer wanted to reduce chemical usage and improve water clarity.

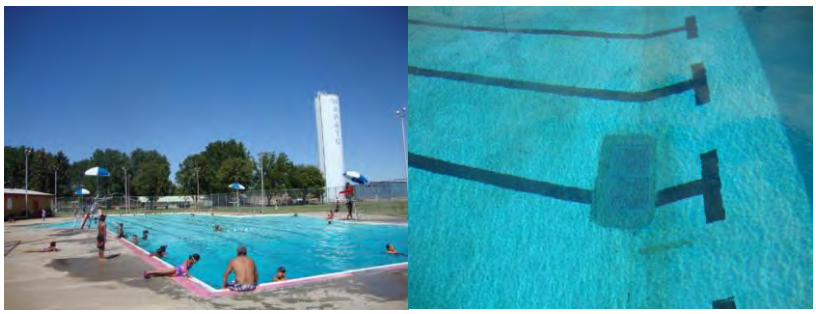

Figure 3.43: Wapato Municipal pool. (Left) One day after installation. (Right) Three days after installation. The water was found to be noticeably cleaner.

Trial method

Installation of one AquaKLEAR P160 (on a 375,000 gallon Municipal Pool) between the pump and Filtration Tank. Then document Pre-installation and Post-installation chemical usage Backwash Frequency, customer satisfaction and water quality. Photos will also be used to provide a comparison. The preliminary trail period was for two weeks. Conclusion: There is marked decrease in Chlorine usage approx 30% (50% prior years) in just two weeks. We expect at least 50% reduction next year. Muriatic acid reduction was approx. 40% and will probably drop to 50% or greater. The Dica-Lite (diatomaceous earth material) should be reduced due to the reduced Backwash volume and frequency. This will also reduce water consumption and electrical costs for heating the water. There is also strong Signal throughout the Entire Facility. This Signal is an unexpected benefit that may treat the boiler and the potable water as well! A strong signal was found in the incoming and outgoing water lines to the boiler and potable water heater. We look forward to the benefits of this technology quite possibly throughout the entire facility.

	Prior Years	2011 Pre-Install	2011 Post-Install (est. 2-wk study)
Sodium Hyper-Chlorite	40 Buckets=$9000.00	30 Buckets=$6,750.00	20 Buckets=$4,500.00
Muriatic Acid	2 tubs=$1,399.98	2 tubs=$1,399.98	1.2tubs=$839.98
Dica-Lite	50bags=$8,750.00	50bags=$8,750.00	<50bags (due to reduced Backwash/Cleaning

Figure 68 Savings made at Wapato pool. The usage of chemicals was reduced in 2011 due to more efficient monitoring even before the AquaKLEAR installation, but was reduced even further after installation.