



Environmental Wastewater Processor

This facility receives and treats oily wastewater from industrial clients. The water is treated with an initial oil/water separator, collected in a reaction tank where Floccin-J is used at a dosage of 325 lbs/18,000 gallons, then dewatered using a filter press. The results of the preliminary tests with just Floccin-J are shown below:



General Analysis (units in mg/L)

	Untreated	Treated	% Removal
BOD	14,100	5,190	63.2%
TDS	3,600	3,560	Negligible

Total Toxic Organics, EPA Method 8260B (all units in ppb)

Removal	Untreated	Treated	
1,4-Dichlorobenzene	181	ND	>99%
Ethyl benzene	168	ND	>99%
Toluene	3,530	19	99.5%

Total Threshold Limit Concentration, TTLC (all units in ppm)

	Untreated	Treated	% Removal
Antimony	ND	ND	N/A
Arsenic	0.032	ND	>99%
Barium	5.64	ND	>99%
Beryllium	ND	ND	N/A
Cadmium	0.141	ND	>99%
Chromium, Total	2.65	0.025	99%
Cobalt	0.169	0.036	79%
Copper	10.2	0.047	99.5%
Lead	4.51	0.015	99.7%
Mercury	ND	ND	N/A
Molybdenum	4.79	1.41	70.6%
Nickel	3.05	0.436	85.7%
Selenium	ND	ND	N/A
Silver	0.039	ND	>99%
Thallium	ND	ND	N/A
Vanadium	0.167	ND	>99%
Zinc	74.1	0.645	99.1%

The picture of the treated and untreated water shows a drastic improvement over the previous coagulant/flocculant chemistry. The value of the Floccin-J is the increased throughput in the facilities operation. Their previous process required a 12hour settling time to be able to start the decanting process. They now can start decanting in 30 minutes. Integrated Engineers, Inc is providing assistance in helping with adding equipment and processes to reuse part of the treated wastewater and meet stringent discharge limitations as a disposal option.

