TAG CANADA

WATER TREATMENT

Plant with paint units wallpaper manufacturing plant

MACHINE WASH WATER PROCESSING

CAS STUDY TAG 41A40

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ANALYSIS
OF THE RESULTS
TAG 41A40

WATER TREATMENT

PLANT:
Plant for applying water-based paints on wood or metal, or for wallpaper. Paint was applied using industrial equipment, such as a calender, shower, or nozzle.

The water-based paints contained either polyvinyl, polyacrylate, urethane, or hybrid alkyl.

SETUP:
When equipment was washed, the wastewater was pumped into a large tank to buffer (equalize) the concentrations of materials in the water. Then the wastewater was sent to coagulation, flocculation, and settling. The settled water was sent to the sewers and the sedimented sludge was dewatered by one or more filter presses or filter bags.

PROGRAM:
TAG Canada Inc. designed the wastewater treatment systems. The coagulant TAG 41A40 and the flocculant TAG 60T90 were used for treatment. Both products have a very wide working range and neutralized the Zeta potential of the wastewater in an acceptable area for sludge dewatering with a filter press or filter bag. Automation was done with a pH meter. The pH value depended on the type of dewatering used.

RESULTS AND ADVANTAGES:
The treatment was functional from system start. Some adjustments were subsequently made to balance the removal of the sludge to the filter press with the quality of the wastewater.

Some minor adjustments were then made to optimize wastewater treatment. Operator intervention was minimal, i.e., they emptied the filter press at the appropriate time, checked the wastewater treatment, and periodically calibrated the pH electrode for coagulation.

CONCLUSION:
When **TAG Canada Inc.'s** program was used, industrial oily wastewater discharge standards were maintained at all times.

The cost of treatment and equipment maintenance was reasonable.