



WATER TREATMENT

Dewatering oily wastewater

CASE STUDY TAG 40A60

ANALYSIS OF THE RESULTS

TAG 40A60



WATER TREATMENT

PLANT:

Motor vehicle plant in southern Quebec.

SETUP:

Approximately 20 minutes of flocculation and dissolved air sludge flotation unit.

PROGRAM:

Water treatment involved the use of caustic soda 50% or sulfuric acid 93% to adjust the pH of the water introduced into the coagulator, and alum or PASS was simultaneously added as a coagulant. The next step was flocculation followed by flotation of the sludge.

PROBLEMS:

The clarified water was still cloudy, so there was oil in the water. Often the oil concentration was slightly below the standard and over a period of 13 months, the four-month results far exceeded the standard.

TAG PROGRAM:

TAG 40A60 was used in place of the PASS or alum. The dosage of TAG 40A60 was two to four times lower than the dosage of PASS or alum.

RESULTS AND ADVANTAGES:

After 12 months of use, the oil and grease residue still met the standard. Visually, the clarified water was clear. The breeding of microflora was eliminated.

Even with better clarified water quality, the volume of dewatered sludge decreased sufficiently to be observed by the operator. Based on calculations, a TAG 40A60 dosage will produce two to four times less sludge than PASS or alum.

The solidity of oily sludge was very high, at 31% dryness. Once the cake was removed from the press, 10 psi of pressure was applied to a sample. A slight mark was made on the surface of the block. These parameters demonstrate that the cake was well dewatered and could be easily removed from the filter press.

CONCLUSION:

When TAG 40A60 was used, industrial oily wastewater discharge standards were maintained at all times. The decreased sludge volume slightly reduced the cost of sludge disposal.

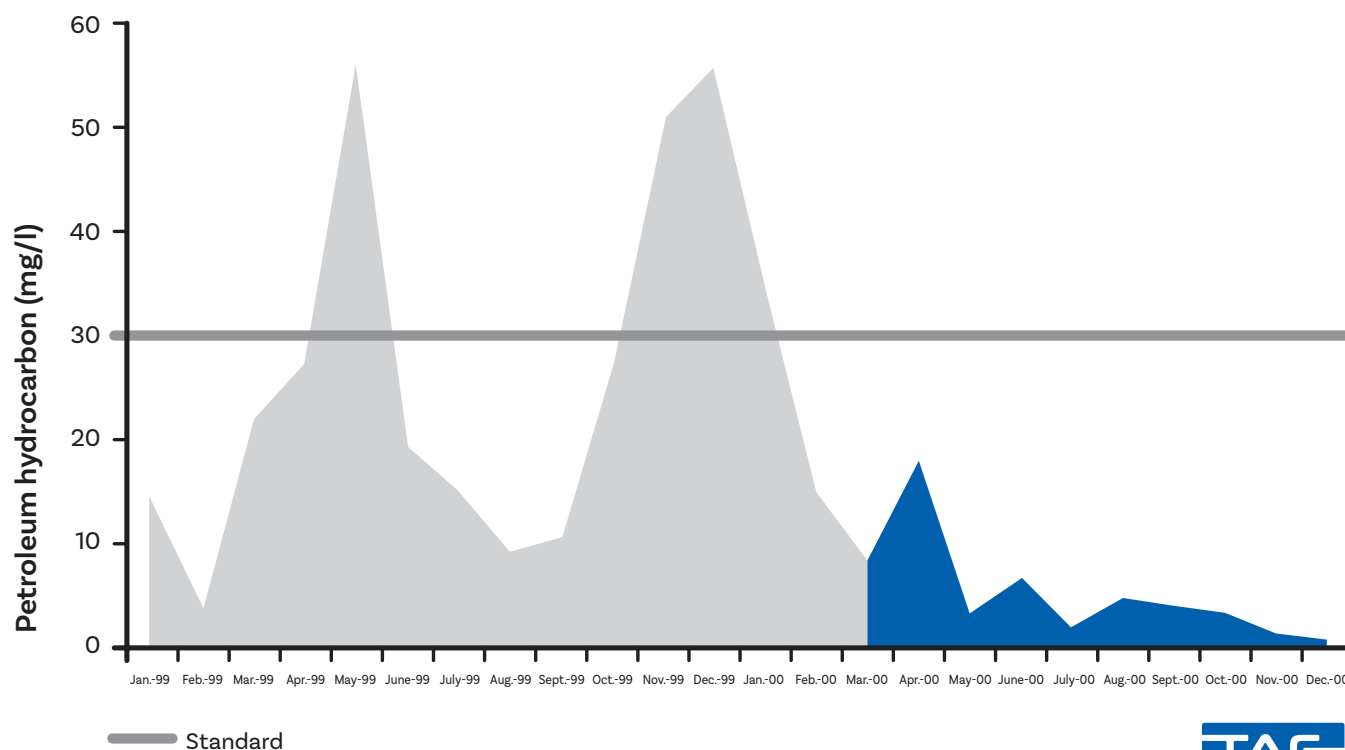
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MONTHLY PETROLEUM HYDROCARBON RESULTS CURVE



WATER TREATMENT

PHOTOS

SHOWING SLUDGE QUALITY

TAG 40A60



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PHOTO 1

Shows the quality of the oily water dewatering. Note that the cake was cut with a knife, because its consistency was similar to shoe polish.



PHOTO 2

Shows the same sample as Photo 1 after being subjected to 10 psi of pressure for five minutes.