CASE STUDY # 67

MUNICIPAL WASTEWATER TREATMENT PLANT CONTROLS FAT, OIL AND GREASE AND ODORS

SUBJECT: Fat, oil and grease (FOG) and odor control in a municipal wastewater treatment plant.

PRODUCT APPLIED: **MICROCAT®-DNT Drain and Trap Bioformula**

TREATMENT SYSTEM: Wastewater flow: 1325 m^3/day

The treatment system consist of a primary clarifier, trickling filter, secondary clarifier, sludge thickener, scum pits and secondary sludge digesters. The wastewater is domestic and commercial.

OBJECTIVE:
The treatment objective was to reduce the amount of fat, oil and grease (FOG) buildup in the scum pits from the headworks and from the primary clarifiers. The FOG accumulations caused blockages within the piping of the treatment system and generated odor from the scum pits.

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PROGRAM:
Application programs with **MICROCAT-DNT** for the treatment plant and scum pits are shown in Table 1. Application rates are based on wastewater flow rates, equipment size, hydraulic detention time and other considerations. **MICROCAT-DNT** is added to a sewer manhole located near the treatment plant boundary fence. **MICROCAT-DNT** is mixed with warm water for 1 – 2 hours before adding it to the manhole.

Population Establishment	Days 1 & 2	2,7 kg
	Days 3 – 10	1,35 kg
	Days 11 – 20	0,45 kg
Preventative Maintenance	Days 21+	0,225 kg

RESULTS:
Since using **MICROCAT-DNT** at the treatment system, the following benefits have been observed:

1. FOG is dramatically reduced in the scum pits.
2. FOG does not accumulate in the headworks of the wastewater treatment plant.
3. The pipelines in the treatment plant operate freely and the grease accumulation is visibly reduced in the lines.
4. The odor from the scum pits is gone..

MICROCAT-DNT is regurlarly added at maintenance dosages to maintain FOG control and minimize odors.