

# Unclogging Sludge Transfer Pipes

*And reducing sludge transfer pump maintenance in a municipal wastewater treatment plant using Microcat® - DNTRF Drain and Trap Bioformula– BSE 070*



## Problem

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In wastewater plants fat, oil and grease (FOG) accumulations frequently cause blockages in the sludge transfer piping. In this municipal plant manual cleanout and jetting of the lines was required every 3-4 weeks. Also, pump failures were frequent due to the clogged lines and the buildup of the FOG on and in the sludge transfer pumps.

The objective of this full scale product application program was the elimination of clogging caused by the FOG accumulations in transfer pipes and pumps from the sludge thickener to the sludge digesters and a parallel reduction in operating costs.

## Product Applied

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## MICROCAT®-DNTRF Drain and Trap Bioformula

### Gravity Thickener

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**Sludge Gravity Thickener: 58,000 Gallons (220 m<sup>3</sup>)** - The gravity thickener is used to take sludge from the primary clarifiers and thicken it to a proper concentration before passing it to the sludge digester. It is a 30-foot diameter tank with an 8-inch center feed well. Overflow liquid effluent from the thickener is returned to the primary clarifiers.

### Product Application Program

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The **MICROCAT-DNTRF** application program for the sludge thickener is based on the size of the gravity thickener and FOG buildup. **MICROCAT-DNTRF** addition is made directly to the thickener tank.

Population Establishment	Days 1 - 7	2 Lbs per day
Population Buildup	Days 8 - 14	1 Lb per day
Preventive Maintenance	Week 3+	2 Lbs per week

### Results

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Since beginning **MICROCAT-DNTRF** addition in the gravity thickener the following benefits have been observed:

1. FOG accumulation in the bottom of the sludge thickener is dramatically reduced.
2. FOG buildup in the pipes going from the sludge thickener to the digester is no longer occurring. Manual cleanout and jetting of the pipes is not required.
3. The frequency of maintenance on the thickened sludge pumps is greatly reduced.

**MICROCAT-DNTRF** is regularly added at maintenance dosages to maintain FOG control and keep the piping free flowing and the pumps maintenance free.

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Dntrf 03102018