

Grease Trap FOG Reduction In Fried Chicken Chain Restaurant

*Grease Trap Fat, Oil and Grease Reduction using
MICROCAT®-GEL Grease Elimination Liquid- QM Case Study 125*



Problem

Large amounts of fat oil and grease (FOG) are generated in commercial kitchens preparing mainly fried foods. A good deal of this FOG finds its way into the drains, plumbing lines, traps and sewer discharge of these kitchens.

A major international fried chicken restaurant chain decided to independently verify the impact of applying **MicroCat - GEL** Grease Elimination Liquid microbial formula in its grease traps. The objective was to quantify the amount of FOG in the normal, untreated grease trap sewer discharge and to compare it to the sewer discharge when the trap was treated with **MicroCat - GEL**.

PRODUCT APPLIED

MicroCat® - GEL Drain and Trap Cleaner



Grease Trap Description

Total Grease Trap Working Volume: 3,8 M³

The grease trap is a commonly-encountered, restaurant floor mounted, two-stage configuration consisting in a primary stage with a baffled entry inlet and overflow outlet and a secondary stage with an underflow outlet discharge to the municipal sewer system.

Application Program

MicroCat-GEL had been used successfully in this restaurant for almost 2 decades prior to this program. The product application rate for this grease trap was based on the size of the trap and historical FOG loadings. During 2 days in April while the product was applied the discharge from the trap to the sewer was monitored using a composite sampling technique. Then, a second sampling was undertaken in August using the same sampling technique having terminated product application and disinfected the trap (in order to remove the last vestiges of product in the trap) 30 days prior. Independent certified sampling and testing contractors were used throughout the program.



Trap FOG Accumulation



Cleaning/Disinfection of Trap

Results

The following results were recorded:

1. Discharge FOG in the April sampling (with Microcat – GEL) – 65 mg/l.
2. Discharge FOG in the August sampling (without Microcat – GEL) – 428 mg/l.
3. **MicroCat – GEL** allows this fried chicken chain restaurant to meet its government-mandated FOG sewer discharge obligations on a consistent basis.

MicroCat – GEL is continuing to be used at this restaurant and added regularly in maintenance dosages to maintain FOG discharge compliance and minimize odors.