

## SCD Probiotics

### Case Study Summary – Treatment of Oil and Grease with SCD Bio Klean™ on Kitchen Wastewater

*Industrial Cleaning – Sludge Treatment (CSS-020-12)*

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**Industry:** Industrial Cleaning  
**Application:** Trial treatment of oil and grease in grease interceptor  
**Products:** SCD Bio Klean™

### Highlights

- The grease interceptor showed that fatty oil and grease were slowly reduced
- The condition of the grease trap improved (compared when it was untreated)

### Introduction

The company canteen serves as the main food supplier for the employees and produces 16 m<sup>3</sup> of daily wastewater. The wastewater flows into a central grease trap towards the ground floor, where it is then discharged. Recently, the concentration of O & G (oil and grease) in the grease traps effluent exceeded the standard of less than 100 mg/L.

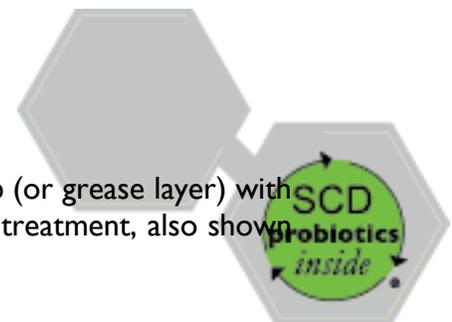
Researchers tried introducing probiotics into the system to clean and reduce O & G. They tested the effectiveness of SCD Bio Klean by applying it regularly into the system—specifically into the grease inceptor and grease trap. SCD Bio Klean is an all-natural, probiotic cleaner containing living microorganisms and their metabolites that break down grease, grime, and dirt. SCD Probiotics, using biotechnology that is increasingly effective for a variety of industrial, commercial, and household applications, manufacture it.

### Methodology

SCD Bio Klean was applied to the grease trap at 4 L per day to help reduce the concentration of O & G in the kitchen wastewater. As an initial test of Bio Klean's effect on FOGs, a trial was performed on a selected canteen kitchen grease interceptor for 8 days. One (1) Liter of SCD Bio Klean was poured daily into the selected grease interceptor after the end of the workday.

### Results

Figure 1 shows the grease trap before the trial. A heavy, solid grease scab (or grease layer) with brown color oil could be clearly seen, covering the entire surface. After treatment, also shown



in Figure 1, the grease scab showed obvious decomposition. In several small areas, the grease was completely broken down and water was visible beneath the surface.

This improvement was accounted for by the living microorganisms' ability to utilize, degrade, or recycle materials and compounds found in the grease trap.

**Figure 1:** Before and After SCD Bio Klean Treatment in the Grease Trap.



Before treatment



After treatment

The grease interceptor was also cleaned regularly. During the trial, oil and grease stayed in liquid form, making surface oil cleanup much easier. After two days, at the end of the trial the oil and grease stayed in liquid form instead of accumulating, hardening and solidifying (as shown by Figure 2).

The living microorganisms in the product break down hard and solid materials in the interceptor, creating a cleaner, pathogen free system. These microorganisms encouraged the decomposition of the materials and compounds that had accumulated as sludge in the system (in the form of grease and oils).



**Figure 2:** Before and After the Application of SCD Bio Klean to the Grease Interceptor.



Before Treatment



After Treatment



After Treatment

## Conclusions

The trial treatment using SCD Bio Klean has shown that the fatty oil and grease in the grease trap have not turned into solids or formed a scab, and the condition of the grease trap has improved (compared to when it was not yet treated). To achieve the desired results, it is advised to continue the use of SCD Bio Klean.

