

GREASOLUX

**THE PERFORMANCE OF THE GREASE
DEGRADING BIOPRODUCT GREASOLUX
IN THE WASTEWATER TREATMENT PLANT
OF THE RESORT TOWN**



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Problem

One of the Lithuanian resort towns, during the warm period of year, continuously had problems with the fat, oil and grease (FOG) accumulation in the sewer lines and wastewater treatment plant. The highly polluted wastewater directly impacted the treatment plant in the following ways:

- **Increased grease accumulation in sewer lines and lift stations;**
- **Poor sedimentation of the active sludge in the secondary clarifiers;**
- **Poorer sludge dewatering results: lower solids content in dewatered sludge;**
- **Greasy sludge blanket on the top of the treatment plant (see pictures).**

Solution

To resolve the grease accumulation problems **GREASOLUX** cartridges were proposed. **GREASOLUX** cartridges are rugged, submersible cylinders, containing highly concentrated environmentally-safe, naturally occurring microorganisms and enzymes, that slowly dissolve and are released to the wastewater.

Dosing

- The daily wastewater flow to the treatment plant of the resort town consists of 600 – 1500 m³ (depending on the season of the year).
- The dose of bioproducts **GREASOLUX L** (4,8 kg) - 2 - 3 units at once.
- The application of **GREASOLUX** started at the beginning of the June, 2013. Two units of **GREASOLUX L** were dosed to the lift stations of the resort town.
- At the beginning the dissolution of greasolux cartridges was very slow and the efficiency of the grease degradation was minimal due to low mixing intensity in the lift stations.
- For this reason, within 14 days from the start up of **GREASOLUX** a third unit of bioproduct was immersed. Also the dosing location was changed – **GREASOLUX L** cartridges were



1 pic. Samples of **GREASOLUX** cartridges

submersed prior the aeration basin of the biological treatment plant.

- A week following the third cartridge installation, the first improved performance features of the microorganisms were observed. By the end of June, 4 weeks after the beginning of **GREASOLUX** usage, the greasy sludge blanket on the top of the aeration tank had completely disappeared.
- **GREASOLUX L** cartridges completely dissolved in 45 days.

Results

After a month of **GREASOLUX** application the following results were observed:

- **The greasy sludge blanket disappeared from the surface of the aeration zone and sedimentation tank of the wastewater treatment plant.**
- **Bad odors were significantly reduced.**
- **The efficiency of the wastewater treatment process increased – the consumption of dissolved oxygen was reduced.**
- **The active sludge sedimentation conditions and sludge dewatering results in the wastewater treatment plant improved.**

CONCLUSION

The performance of bioproducts **GREASOLUX** has proven to be an efficient agent to solve the grease problems in the treatment plant of the resort town during the holiday period. The sufficient dose was 3 units of **GREASOLUX L**, in order to reduce the negative effects of fats for the performance of the treatment plant with the capacity up to 1500 m³ of wastewater per day.



2 pic. Wastewater treatment plant before and during **GREASOLUX** use.

If you have any questions on use of **GREASOLUX, please contact us and we will kindly provide a consultation**