

“Green Cleaning Technology” for drainage lines/septic tank concerns in a 5 Star Hotel

Introduction:

One of the finest and luxury class 5 star hotel of Indian group located in Gujarat faced several concerns related to their drainage lines and septic tanks. This three storeyed hotel having approximately 90 rooms generates 136 m³ of sewage everyday from various sources like kitchen, cafeteria, laundry, toilets. The sewage is collected in 2 pits (septic pits) to be further sent for treatment and disposal.

Concerns:

- Accumulation of fats, oil and grease in the drainage line thereby leading to clogging of pipe lines
- Obnoxious odour
- Nuisance of flies, mosquitoes and cockroaches around the septic tank
- High frequency of operation and maintenance with high expenditure

Solution:



Malatech Water's “*BIOCLEAN SEPTIC*” IS THE SOLUTION

A 4 week bioaugmentation program was implemented considering the existing situation of the drainage line and septic pits. “*Bioclean Septic*” was applied through various plumbing outlets like toilet flushing, bathroom sinks, wash basins etc.

“*Bioclean Septic*” is a unique microbial consortium that comprises of multiple superior strain of microbes that are capable of degrading sludge accumulated in the pipes, septic tanks, leach drains. These microbes are more aggressive than some of the humble species living in septic tank. These microbes digests fats, oil, grease and other organic waste buildup turning into carbon-di-oxide (CO₂) and water (H₂O).

The beneficial microbes present in “*Bioclean Septic*” have appropriate metabolic capabilities and are specially selected to digest the accumulated fats, oil, grease, proteins, paper, starch and other organic buildup by secreting necessary enzymes.

“*Bioclean Septic*” is cost-effective, proven and an eco-friendly solution that not only prevents clogging

but also increases the life span of drainage lines / septic tanks by reducing the frequency of sewage pumpout and by reducing the operation and maintenance workout.



Before using *Bioclean Septic*



After using *Bioclean Septic*

Pictorial Demonstration*

Benefits obtained:

- Reduction in COD (Chemical Oxygen Demand) and FOG (Fats, Oil and Grease)
- Free flowing drain lines with no accumulation
- Effective prevention of septic system back-up
- Maximum odour reduction
- Reduction in chemical consumption
- Reduction in operation and maintenance cost
- Freedom from flies, mosquitoes, cockroaches
- Long lasting eco-friendly solution

Results: The above benefits were obtained in a span of approximately 20 - 25 days.

Conclusion:

Choking of drainage pipe lines due to accumulation of sludge, obnoxious odour from septic tanks are common day-to-day problems faced by residential areas, hotels, restaurants, commercial places like malls, IT parks etc. Chemicals are heavily used to resolve these concerns but it is not an ideal long lasting solution and rather poses exposure to toxic substances. It may also lead to additional drain cleaning, treatment and maintenance.

Biological cleaners present in *Bioclean Septic* play a very important role in treating such concerns. They provide powerful, broad-spectrum capabilities that are far greater than enzymatic chemical available in the market today. *Bioclean Septic* develops a healthy microflora is developed that effectively degrades all the organic sewage pollutants thereby maintaining the natural biological health of the septic systems.

Using our advanced microbial technology viz. ***Bioclean Septic***, the hotel was able to achieve further efficiency in their wastewater treatment plant along with lowered cost of treatment. The treated waste water is recycled to irrigate lawns and other garden plants in the vicinity of the hotel.

* The above picture is used for pictorial presentation