



# ODOUR & FOG's REMOVAL from SEWER MAINS AND PUMP STATIONS

## PRODUCT: For Earth Bio Plus®

For Earth manufacture and supply a liquid product that contains microbes which gradually degrade **fats, oils and greases** (FOG's) that cause pipe narrowing and odour issues in sewer pump stations.

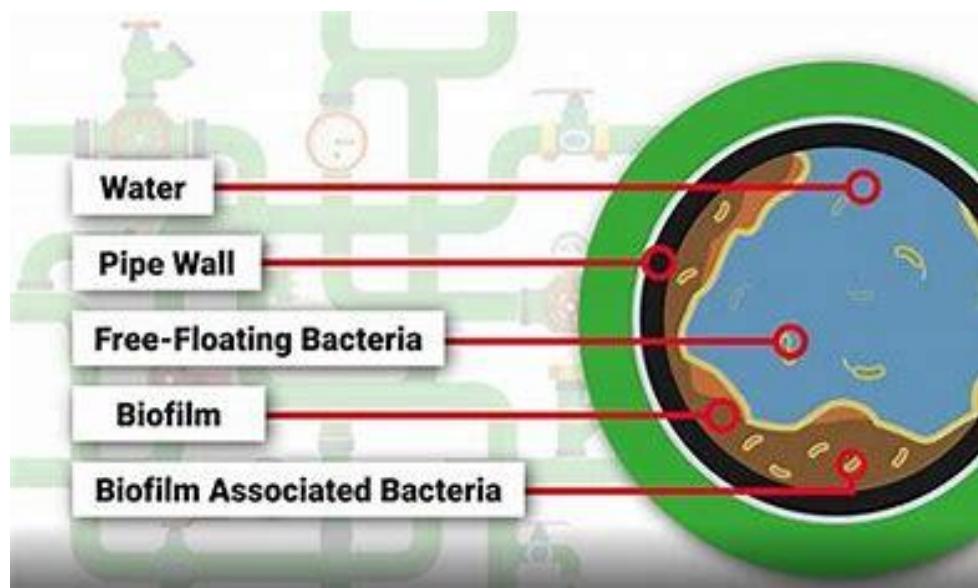
The photo below highlights fat and biofilm narrowing of the pipe. This creates the perfect environment for Hydrogen Sulphide bacteria to live and multiply creating large volumes of H<sub>2</sub>S gases.

For Earth Bio Plus contains microbes that will slowly remove this fat and biofilm which in turn reduces the volume of Hydrogen Sulphide bacteria to colonise and produce H<sub>2</sub>S gases.



Above: Sewer pipe gravity flow main with narrowing from fats, oils and greases.

## Cross Section of a Typical Wastewater pipe



## Benefits of Dosing For Earth Bio Plus in Sewer Pump Stations

- Significant reduction in H<sub>2</sub>S gases at pump station and relief valves
- Reduced H<sub>2</sub>S corrosion of metals
- Reduced narrowing of pipes, improved pumping performance
- Recommended prior to any internal pipe inspection
- OH&S risk reduction for staff and public
- For Earth Bio plus is beneficial for the receiving sewage plant and will reduce odours at inlet works.
- Supplied in 20L, 25L, 205L and 1,000L volumes

## Sample Project Results of dosing Sewer Pump Station

SUMMARY of H <sub>2</sub> S Log Results							
ODOUR REDUCTION TRIAL							
Instrument Odalog							
Av DWF: 430kL/d							
Product: For Earth Bio Plus							

Details	Start	Finish	Days	H <sub>2</sub> S ppm		H <sub>2</sub> S ppm Mins > 300	H <sub>2</sub> S ppm Mins > 200
				Max H <sub>2</sub> S	Av H <sub>2</sub> S		
Pre Dosing	5/03/2018	12/03/2018	8	322	37	97	367
20L/week 6 dosing periods/day	27/03/2018	13/04/2018	14	274	12	0	19

- Average H<sub>2</sub>S dropped from 37 to 12 ppm.
- H<sub>2</sub>S spikes above 300 reduced from 97 to 0 occurrences
- H<sub>2</sub>S spikes above 200 reduced from 367 to 19 occurrences
- Daily cost of product \$30.00
- Odalog instrument placed inside well.

## Are you experiencing Staff or Public Complaints about Sewer Odour?

An odour removal process can be implemented and validated using an Odalog instrument.

Readings are taken before dosing **For Earth Bio Plus** and then post dosing to validate odour reduction.

There are various instruments to measure H2S odours emitting from pump stations, manholes and relief valves. OdaLog instrument is commonly used to record H2S levels. The instrument is hung inside the well and takes periodic measurements. Results can be uploaded to laptop via wireless or cable and raw data applied to a spreadsheet for review.



Left: Odalog instrument

The instrument can be purchased or hired from various instrument supplies  
Eg: Thermo Fisher

## Dosing options – For Earth Bio Plus



Left: Dosing pump plugged into 24hr power point timer. Below: S/Steel dosing cabinet



Please don't hesitate to contact me if you have any questions.

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Manager



# Notes..



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