

**Project:** Meat Processing , Bio Reactor.

**Waste type:** Waste water from meat processing. High grease and fat contents.

**Problems:**

1. Grease trap overloaded and drain blockages. High cost of regular pump outs and unblocking of drains.
2. Odour issues.
3. Untreated grease and fats entering Council sewer system. High BOD's.
4. No recycling or reuse of waste water

**Solution:** **Install an onsite waste water treatment system – Bio Reactor**

1. Install two 10,000 litre open concrete tanks in series, aerate and dose probiotics into both tanks to create an accelerated treatment system.
2. Automatic settling period for 2<sup>nd</sup> tank which allows top water to be decanted and reused for irrigation of property.

**Results:**

1. BOD has dropped from >2000 to an average 600 and improving.
2. No odours. No grease or fat build up. No pump outs required.
3. Water being reused for irrigation.
4. Excess treated water entering Council sewerage significantly improved quality.



Tank aeration & Auto dosing



Top water allowed to settle and decanted for irrigation



Aeration and dosing of tank



Holding tank for decanted water

13<sup>th</sup> December 2007

Enquiries to: Maree Smith  
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Reference: H07 4991/4993

TO: [REDACTED]  
[REDACTED] Food Processing  
[REDACTED]  
[REDACTED]

**LABORATORY REPORT**

Date Sampled : 28.11.07  
Date Received : 28.11.07  
Sample Description : Water – Tank  
Method Reference : MET 017.2, APHA, (21st Ed) 2005, *Standards Methods for the Examination of Water and Waste Water.*

**RESULT OF ANALYSIS**

Laboratory ID	Sample Description	BOD <sub>5</sub> (mg L <sup>-1</sup> )	Total Oil and Grease (mg L <sup>-1</sup> )	Total Suspended Solids (mg L <sup>-1</sup> )
H07 4991	No. 1 Tank	2270	NA	415
H07 4992	No. 2 Tank	875	NA	80
H07 4993	No. 4 Tank	715	49	40

NA: Not Applicable

Please note: An invoice for these services will be forwarded to you in the near future.



M. Smith  
Laboratory Manager

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*A sustainable high quality of life for all*