Australian & New Zealand Biosolids Partnership

Biosolids Case Study Template

Technical Aspects

Project Name & Location
Barwon Water Short Term Biosolids Management Project
Black Rock Rd. Connewarre
Victoria.

Year of Commencement of Operation
2004

Ultimate Use of Biosolids (land application, incineration, landfill capping etc)

- land application

Organisation
Barwon Region Water Corporation

Key Contact Details

- Michael Naughton
- Coordinator Recycled Water & Biosolids
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Quantities

- Dry solids (t/yr) - 6500
- Moisture Content of Final Product (%ds) - 70

Quality and Classification (using State Biosolids Guidelines Definitions)

Parameter	Quality	Classification
• Heavy Metals		
Zinc – C2		
Copper – C2		
Cadmium – C2		
Other		
• Microbial – T2		
• Other		

Restrictions to Use Due to Quality
Applied to land as a T3 product under EPA Victoria guidelines

Treatment

- Stabilisation – Aerobic Secondary Treatment

- Dewatering – Gravity Deck & Belt Press

- Further Processing (composting, drying, lime stabilisation etc.) – 12 months storage then air drying

- Cartage (inc approximate distance) – 30 km

- Spreading (if applicable) – Applied by Barwon Water contractor

Unit Costs (A$/dt) Component Cost • Processing • Cartage $44 per wet tonne • Spreading all up	**Income** (A$/dt) – Nil
Environmental Management Requirements • EIP (or similar) – Required for each application site • Monitoring (tests & frequency) – contaminants, nutrients and microbiology each 500 dry tonnes • Reporting - annually	

Community Engagement

Key Community Perception Issues

Issue How Addressed

- Appearance of biosolids – brown friable material

- Odours – relatively odour free when dried to 70% dry solids. Strict controls on drying operations.

- Fear of Contamination – Farmers are comfortable, public less so, but given the material is applied to broad acre farms for growing cereal crops seems to attract little concern when used in accordance with EPA guidelines

- NIMBY Syndrome – Farming community seem relatively comfortable with the land application program. Initial concerns were with the proposal to dry the biosolids nearby. Opposition decreased when drying facility was located away from the district on Melbourne Water land.

- Other – Product has become sought after by farmers due to increased yield.

Stakeholders and Engagement Methodology

Stakeholder (Individual or group) Engagement Methodology Outcome

- Federal – N/A

- State – N/A

- Regional – Community Meetings held in Geelong

- Local – Community Meetings and Field Days held on farms in the Balliang region

Costs for Community Engagement (A$) – Not Available

Key Learnings

- Start community consultation process as early as possible.
- Provide community with all the information possible. Ensure community is well informed early in the engagement process.
- Don't make assumptions about what community might think is important.
- Community feelings and sentiments can carry a lot of weight and need to be understood early.
- Be aware of web sites making false claims about biosolids and have good arguments ready to counter those claims.
- Community sensitivities can be difficult to turn around.
- Establish who the local community leaders are and spend time ensuring they are well informed.
- Encourage stakeholders to attend conferences and learn about biosolids for themselves. This may not change their mind but open them up to ideas that provide for a better outcome.

Testimonials	Eric Sharkey Farmer
Photos	See attachment
Approval Statement	

Sludge Storage Lagoons – 500 metres long x 50 metres wide

Drying Biosolids in drying bay

Stockpiled product ready for testing and transport

Typical biosolids land application to farms in the Balliang region

Benefits of Biosolids - Canola crop