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Department of Planning and Environment  
Industry and Assessment  
PO Box 39  
SYDNEY NSW 2001  
Kate.Masters@planning.nsw.gov.au

Attention: Ms Kate Masters

Standard Post and Electronic Mail  
1 December 2016

Dear Ms Masters

**Mayfield Resource Recovery Facility SSD 7698 – 1a McIntosh Drive, Mayfield West, Newcastle**

I refer to the State Significant Development (SSD) 7698 and environmental impact statement for the Mayfield West Recycling Facility, located at 1a McIntosh Drive, Mayfield West.

In addition to advice the Environment Protection Authority ("the EPA") forwarded to the Department of Planning and Environment (DoPE) on 24 November 2016 in relation to SSD 7698, the EPA has further reviewed the environmental impact assessment titled "*Environmental Impact Statement, Mayfield West Recycling Facility, 1a McIntosh Street Mayfield West*" ("the EIS") prepared for Benedict Recycling Pty Ltd dated October 2016 and in particular Appendix G - Water Assessment. As a result, the EPA requires the proponent to address the following issues prior to the EPA recommending conditions of approval.

- 1) A key of the Secretary's Environmental Assessment Requirements (SEAR) is for the EIS to provide "*details of the key pollutant concentrations of the wastewater before and after treatment with reference to relevant water quality guidelines.*"

The EIS assessment is limited to potential pollutants that have existing licence limits. The EIS states that *only waste such as masonry and timber are stored outside, with all other wastes stored inside the main processing shed*. Contrary to this statement, the EPA is aware that other wastes, such as asphalt waste and soils are stored external to the main processing shed.

There is no consideration of other potential pollutants and toxicants that may be present in waste water from current activities on site and from runoff and breakdown of material brought to the site and stockpiled external to the sheds on site. For example:

- i) Nutrients and pesticides/herbicides in garden waste;
- ii) Hydrocarbons, polycyclic aromatic hydrocarbons (PAHs) and metals in asphalt waste, cement batch plant waste and soils;
- iii) Heavy metals in metal waste and timber waste.
- iv) Chemicals used on site including, cleaning chemicals, process chemicals, pesticide or herbicides, sediment basin flocculants.

It is the responsibility of licence holders to ensure that their licence specifically regulates the discharge of all pollutants from their premises that pose a risk of non-trivial harm to human health or the environment. Assessment of the potential impacts to human health or the environment of a discharge should make reference to the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC and ARMCANZ, 2000), in particular, trigger values for slightly to moderately disturbed ecosystems.

To understand the full range of pollutants contained in the discharge from the premises the discharges must be characterised. For example this may include:

- i) An environmental audit of the premises to develop a profile of chemical pollutants and/or naturally occurring pollutants that may be in the discharge from the premises;
  - ii) An inventory of the chemicals used at the premises;
  - iii) An assessment of the risks of water pollution based on the adequacy of storage, handling and management of the chemical pollutants at the premises;
  - iv) Research to identify the range of pollutants commonly found in discharges from an industry type or similar premises, or from particular products and material brought into the site that may enter discharge waters.
  - v) Sampling and chemical analysis at different times where the pollutant types and concentration in the discharge may vary with different operational activities at the premises.
- 2) The EIS does not adequately address a range of further options to reduce pollutant loads and avoid an increase in pollutant loads discharged from the premises. All practical alternatives to pollutant discharge must be investigated and evidence provided on the assessment of alternatives. Potential options could include, but are not limited to:
- i) Reducing the contamination or generation of polluted stormwater;
  - ii) Installing roofing over parts of the site to allow 'clean' run-off to be discharged direct to stormwater to reduce the volumes of polluted run-off draining to the perimeter drain and into the final sediment basin.
  - iii) Increasing reuse of water and assessing the fate of pollutants in reuse water;
  - iv) Providing adequate treatment options for any identified toxicants in wastewater that is to be discharged.
- 3) Sediment basin sizing and operation.


The proposal includes a greater area of stockpiled waste and therefore increases the volume of contaminated run-off collected by the perimeter drain and final sediment basin. However, there is no corresponding increase in the size of the sediment basin so that adequate management periods to settle sediment are in place.

Sediment basins are not designed to treat oil and grease and other toxicants. Sediment basins and sizing of sediment basins in accordance with the *"Managing urban stormwater: soils and construction"* publications is based on sediment that is not affected by other potential pollutants. An increase in loads of these toxicants is not acceptable and toxicants require suitable prevention or treatment in relation to discharges.

It is recommended that the above deficiencies in the Water Assessment are addressed prior to the EPA providing recommended conditions of approval.

Should you have any further questions in relation to this matter please contact Karen Gallagher on 02 49086822.

Yours faithfully

A handwritten signature in blue ink, appearing to be 'S. James', is written over a circular stamp. To the right of the signature, the date '1/12/2016' is handwritten in blue ink.

**STEVEN JAMES**  
**Unit Head, Waste Compliance - Hunter**  
**Environment Protection Authority**

