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16 March 2017

Dear Ms Masters

Comment on Environmental Impact Statement Mayfield West Recycling Facility (SSD 7698) 1a McIntosh Street Mayfield West

I refer to the above development proposal's Environmental Impact Statement (EIS) which has been prepared by EMM Consulting Pty Ltd. The EIS is dated 10 October 2016 – Version 2. The report identification number is J14152RP1 and has been prepared for Benedict Recycling Pty Ltd.

Fire and Rescue NSW (FRNSW) have reviewed the EIS, including various Appendices, in particular, Appendix D – Environmental Management Plan (EMP) - Revision 3, dated 31 May 2016.

FRNSW notes that the existing facility currently has development consent (DA 15_291) to accept up to 90,000 tonnes per annum (tpa) of "pre-classified general solid waste (non-putrescible)", as defined by the Environment Protection Authority (2014a). The facility proposes to increase the annual volume of material received at the recycling facility from 90,000 tpa to 315,000 tpa. Minor changes to the site layout to include additional stockpile area are also proposed.

With regard to waste and resource management facilities, it is FRNSW experience that due to the processes undertaken and the nature of the products stored and processed, they are subject to more frequent and significant fire incidents (often of long duration) that require the deployment of considerable FRNSW resources in order to be safely resolved.

In addition, due to the nature of materials being stored and processed at the facility, there is significant potential for large volumes of contaminated fire water runoff to pollute off-site storm water management systems and water courses, such as the Hunter River which is located within 40 metres of the site. Due to the significant

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potential, there is an increased likelihood that FRNSW personnel would need to actively manage the containment of polluted fire water runoff during a fire incident (n.b. a specific function imposed upon the Commissioner of FRNSW by virtue of Section 10A of the Fire Brigades Act 1989).

Based on our review, the following comments and recommendations are submitted to the Department of Planning and Environment (the Department) for consideration:

Comments/Recommendations

- 1. FRNSW recommends that the proposed fire measures for diesel fuel storage, diesel dispensing, tank vehicle loading and associated fire protection for the proposed stored Dangerous Goods, which includes 15,000 litres of Liquid Petroleum Gas (LPG) and approximately 40,000 litres of diesel (current approval section 2.2.4 of the EIS), be detailed in accordance with the requirements of Australian Standard AS 1940 2004. Detailed information and drawings should be provided which clearly indicates the storage location of the listed dangerous goods (diesel and LPG in particular), associated bunded areas and any fire protection afforded to these locations.
- 2. FRNSW considers the proposed increase in materials to be stored and processed at the facility to represent a realistic possibility for a high fire load and fire hazard with the potential for problematic and prolonged firefighting operations. Such an incident at the facility would require significant resource commitment by FRNSW in order to ensure safe resolution of the fire incident.

The EIS and EMP do not provide any details or commitments to upgrade the existing fire hydrant system at the site in order to assist FRNSW in undertaking its statutory duty for the extinguishment of fires and protecting life and property, in case of fire at the facility. It is also detailed within the EIS that minor changes to the site layout are proposed to include additional stockpile areas however no additional fire hydrant information or detailed hydrant drawings have been included for assessment relating to these areas.

In the event of the development proposal being approved, while taking the high fire load potential of the development into account, FRNSW recommends that any conditions of consent include a requirement that the development comply with Clause E1.10 of the National Construction Code. In particular, the fire hydrant system's performance, with respect to minimum flow rates, should be specifically addressed. Additionally, FRNSW would not consider Table 2.1 of AS 2419.1 – 2005 to be an appropriate methodology to determine the fire hydrant system's minimum flow rates.

3. FRNSW note that section 4.3.2 (iii) of the EIS states that an assessment against applying SEPP 33 indicates (in part) that the proposal is not potentially hazardous and does not pose a significant risk to or have a significant adverse impact on human health, life, property or the biophysical environment. Therefore, a preliminary hazard analysis is not required.

Notwithstanding, as detailed above in item two, it is FRNSW experience that at facilities where large quantities of combustible materials are stored,

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processed and transported, there is potential for a significant fire incident to occur.

Consequently, it is FRNSW recommendation that the proponent, or their nominated consultant, engage with FRNSW when undertaking the design of the facility's fire systems (in particular the design and minimum flow rate capability of the fire hydrant system, including critical components such as the location of the fire hydrant booster assembly, fire hydrants and tank water supply). The above consultation and design requirements are recommended to be undertaken to the satisfaction of FRNSW.

4. As detailed above, the nature of this particular development will require FRNSW personnel to pro-actively manage an incident of fire and the subsequent containment of polluted fire water runoff during/after an incident. With the Hunter River being within 40 metres of the site, the EIS currently does not clearly identify the facility's maximum capacity of contaminated firewater containment.

FRNSW recommends that the site's surface and storm water management systems be designed to provide FRNSW with an ability to contain contaminated fire water runoff. The design of the containment systems capacities is recommended to take into account a number of worst case fire scenario's at the proposed facility and clearly identify the site's containment capacity and identify automatic systems that will contain any contaminated firewater to the site. The scenario's should include a fire incident within the main processing shed (which is currently not proposed to be sprinkler protected); the segregated heavy waste processing and stockpiling area and the recycling feed products as indicated by photograph 2.14 in the EIS, all of which have the potential for prolonged firefighting operations.

5. FRNSW recommends that additional information should also be provided in relation to the proposed facility's storage and separation plans for the recycling feed products as indicated by photograph 2.14 in the EIS. Should fire protection measures such as fire hydrants or fixed fire monitor coverage be proposed for this location, a detailed drawing should be provided to clearly indicate how the stored recycling feed products is proposed to be protected.

For further information please contact Cameron Wheatley of the Fire Safety Assessment Unit, referencing FRNSW file number BFS16/2399 (11950). Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely

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Team Leader

Fire Safety Assessment Unit