Fire & Rescue NSW

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Contact: Mark Castelli

22 March 2016

The Department of Planning & Environment
C/- Emma Barnet
GPO Box 39
SYDNEY NSW 2001

Email: emma.barnet@planning.nsw.gov.au

Dear Ms Barnett

Proposed ResourceCo Resource Recovery Facility
35 Frank Street, Wetherill Park (SSD 15_7256)

I refer to the above development proposal's Environmental Impact Statement (EIS) which is currently on public exhibition (from the 17 March 2016 to the 2 May 2016).

Fire & Rescue NSW (FRNSW) have reviewed Part 12 of the EIS (Hazard & Risk Assessment) and various appendices. FRNSW note that the primary purpose of the facility is to receive waste and process it into process engineered fuel (PEF). As detailed in the exhibited documents, PEF possesses a high calorific value and therefore has significant potential to be a high fire load with associated risks.

In addition, due to the nature of materials processed, there is significant potential for contaminated fire water runoff to pollute off-site storm water management systems and water courses (e.g. Prospect Creek). Due to the significant potential there is an increased likelihood that Fire & Rescue NSW (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 & Environment (DPE) for consideration:

1. Table 1 of Appendix 8 of the EIS states that it is proposed to develop an alternative solution to address EP2.2 of the BCA. The proposed alternative solution is described as rationalising the required automatic smoke hazard management system to a smoke clearance system (presumably a system activated manually by FRNSW personnel). It is unclear whether the smoke exhaust rate is also intended to be reduced.

FRNSW considers PEF to be a material that is a special hazard as detailed in Clause E2.3 (c) of Volume One of the Building Code of Australia (BCA).

In the event of the development proposal being approved, and due to the potential high fire load nature of the development, FRNSW recommends that any conditions of consent include a requirement that the development comply with Clause E2.3 of the BCA. In addition, that the smoke hazard management system be automatically activated and have a smoke exhaust capacity that is determined by first principal assessment rather than reference to Figure 2 of Clause 3 of Specification E2.2b of the BCA.

2. Section 6.1 of the Building Code of Australia Report (Appendix 20) states that a fire hydrant system is required to be provided to the requirements of Clause E1.3 of the BCA and Australian Standard (AS) 2419.1 – 2005.

   FRNSW considers PEF to be a material that is a special hazard as detailed in Clause E1.10 (a) of Volume One of the Building Code of Australia (BCA).

   In the event of the development proposal being approved, and due to the potential high fire load nature of the development, FRNSW recommends that any conditions of consent include a requirement that the development comply with Clause E1.10 of the BCA. In particular, the fire hydrant system's performance, with respect to minimum flow rates, should be specifically addressed. FRNSW would not consider Table 2.1 of AS2419.1 – 2005 to be an appropriate methodology to determine the fire hydrant system's minimum flow rates.

3. As discussed earlier, the nature of this particular development will require FRNSW personnel to pro-actively manage the containment of polluted fire water runoff during a fire incident.

   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 systems' capacities is recommended to take into account the concurrent operation of the sprinkler and fire hydrant systems.

For further information please contact Mark Castelli of the Fire Safety Assessment Unit, referencing FRNSW file number BFS16/465 (10043). Please ensure that all correspondence in relation to this matter is submitted electronically to bfs@fire.nsw.gov.au.

Yours Sincerely

Superintendent Mark Reilly AFSM, CMIFireE
Manager
Fire safety Assessment Unit
FRNSW