



Our reference: DOC16/266415

Team Leader Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Director – Mr David Mooney

EMAIL & STANDARD POST

1 June 2016

Dear Mr Mooney

SSD 7267 - SUEZ Resource and Recovery Pty Ltd – Application to increase the solid (putrescible) waste capacity from 10,000 tonnes per annum (tpa) to 140,000 tpa – Wetherill Park Resource Recovery Facility

On 26 April 2016 the EPA received notification from the NSW Department of Planning and Environment (DPE) regarding State Significant Development SSD_7267 – Increase in putrescible waste at the Wetherill Park Resource Recovery Facility to 230,000 tonnes per annum (the Proposal). The Proposal was initiated by SUEZ Resource & Recovery Pty Ltd (the Proponent).

Wetherill Park Resource Recovery Facility currently operates under Environment Protection Licence No. 4548 (the Licence) to undertake the Scheduled Activities of Waste Processing (non-thermal treatment) and Waste Storage at 20 Davis Road, Wetherill Park - Lot 402 DP 603454 (the Premises).

The EPA has reviewed the environmental impact statement "Increase Capacity in Putrescible Waste at Wetherill Park Resource Recovery Facility - Report Number. 147628002" prepared by Golders Associates (March 2016) and associated documents. However, the EPA advises that it cannot make an adequate assessment of the Proposal due to insufficient information in the EIS. Appendix A provides detail on where the relevant deficiencies are.

Should DPE approve this Proposal based on the current EIS, the EPA has provided draft conditions that it will seek to add to the Licence (see Appendix B). The DPE may wish to include some or all of these proposed conditions in the Development Consent.

I note that comments provided by the EPA are based on the information provided in the EIS. Should the Proposal be approved and there are unacceptable impacts on the community or environment from the Proposal, the EPA may vary the Licence to require additional mitigation measures.

If you have any questions or require further information please contact Josh Madden on (02) 9995 5077.

A handwritten signature in black ink, appearing to read 'Trevor'.

TREVOR WILSON
Unit Head Waste Compliance
Environment Protection Authority

APPENDIX A – EPA Comments on the Proposal - SSD 7267

The Proposal

The Proponent is seeking to obtain development consent to increase the approved putrescible waste capacity of the Wetherill Park Resource Recovery Facility from the existing 10,000 tonnes per annum (tpa) to 140,000 tpa (the Proposal). The Proposal would increase the total waste accepted at the site from 100,000 tpa to 230,000 tpa, with the remainder being non-putrescible waste. The site is operated under existing Environment Protection Licence (EPL) 4548. The Proposal includes the following:

- An increase in putrescible waste;
- Construction of hardstand areas for additional truck and trailer parking and construction of a new workshop;
- Construction of an additional exit from the main transfer building. No change in the existing building footprint is proposed; and
- Construction of access ramps, suspended slab and hardstand area to establish a small vehicle drop off area to separate domestic drop-offs with commercial drop-offs.

SUEZ have submitted an Environmental Impact Statement (EIS)¹ for the Proposal, which includes an Air Quality and Odour Assessment (PEL, 2016)². It is noted in the EIS air assessment that the nearest residential receptor is located ~1.5 km from the site.

1 Odour Impacts

In reference to Air Quality, the EPA is concerned about odour impacts resulting from the Proposal. The EPA is not able to adequately assess the Proposal because the calculations of odour emissions provided in the Environmental Impact Statement are not representative of the assumptions and proposed site operations.

Further detail is provided below.

1.1 Calculated odour emissions are not based on proposed operations and do not account for a worst case scenario

The Proponent's assessment of odour has been based on estimating odour emissions for the current and proposed waste throughputs with subsequent dispersion modelling. Assumptions included for estimating odour emission rates include:

- Utilising odour concentration from sampling conducted on the active tipping face for the Eastern Creek Landfill. The EPA agrees that this data is representative of putrescible waste.
- The maximum odour concentration was utilised for estimating odour emissions from putrescibles for the Proposal.
- Estimating daily volume and exposed area of waste based on:
 - a. annual throughput of the proposed waste types and quantities; and
 - b. assuming half of the waste is transferred to trucks.

¹ *Environmental Impact Statement Increase Capacity for Putrescible Waste at Wetherill Park Resource Recovery Facility* prepared by Golder Associates dated March 2016.

² PEL, 2016 – *Wetherill Park Resource Recovery Facility Upgrade – Odour Assessment*, prepared by Pacific Environment Limited, dated 4th February 2016

The EPA considers that the assessment presents a reasonable estimation of odour emission rates for assessing impacts from routine operations, however it is unclear if maximum potential odour emission rates have been considered. The EPA considers that a worst case scenario could potentially be double the odour emission rate adopted within the assessment based on:

- The EIS air assessment has adopted an odour emission rate of ~700 OU/s.
- page 73 of the EIS outlines a maximum daily volume of putrescible waste of 575 m³, with the volume of the pit outlined as 585 m³;
- based on the depth of the pit (1.5 m) the EPA estimates the exposed area for odour emission flux would be $575 \text{ m}^3 / 1.5 \text{ m} = \sim 383 \text{ m}^2$;
- A maximum potential odour emission rate would then be estimated by multiplying the odour concentration data for putrescibles of 3.65 OU/m²/s by the area. An emission rate of ~1400 OU/s is estimated.
- This situation would result in an emission rate of around 1400 OU/s and a potential odour concentration of 4 OU at the nearest neighbouring **industrial** facility. Odour at other surrounding facilities may be lower but would be still detectable during this scenario.

Given the nearest **residential** areas are 1.5km away, it is unlikely that odour concentrations above the 2 OU criteria would occur, and offensive odour detected at the nearest residential areas are unlikely.

The EPA requires more information about the potential worst case scenario for odours using the emission rate of ~1400 OU/s.

1.2 Projected odour emissions do not include stockpiled waste

The EPA notes from inspections of the Premises and as described in Table 9.1, waste will be deposited from commercial vehicles on to the floor before being placed into the surge pit. On a recent inspection of the Premises by the EPA, officers observed a large stockpile of putrescible waste outside of the surge pit. It is presumed that this activity is required to keep waste streams separate, ie putrescible waste is removed, or kept separate from the C&I was stream.

While the EPA supports the separation of wastes, it is unclear how much putrescible waste will be stockpiled on the floor at any one time. The EPA notes that without this information the calculated surface area of odour generating waste, and thus odour emission rates may be significantly underestimated. The EPA notes that the Proponent is required to describe the waste handling process as part of the SEARs and this has not been provided in the EIS.

The odour assessment relies on a proposed 61% putrescible to 39% non-putrescible waste ratio in order to stay at or below 709 OU/s. The EPA has concerns regarding this as the information provided in the EIS does not make it clear:

- If this ratio is representative of the incoming waste stream;
- how the Licensee will ensure that this ratio is maintained throughout a working day/week; and
- how the Licensee will be able to keep the waste streams separate on the working floor (as described on page 92 of the EIS).

The EPA requires more information about how the Proponent will manage operations onsite to stay below a maximum odour emission rate of 709 OU/s at the same time as achieving the separation of waste streams proposed.

1.3 Cleaning processes for surge pit and floor are not described

The EPA is concerned that the Proponent has not described how the surge pit and floor will be cleaned and to remove leachate and wet waste residue. The EIS states that the surge pit can be expected to be cleared out twice a day. It is not clear if this "clean out" is by water or another method. It is the EPA's experience that the cleanliness of a facility greatly affects the level of odour generated and potentially emitted beyond the premises boundary. Putrescible waste from domestic sources can be high in organic matter and liquids which can become highly odorous if not managed properly.

The EPA expects that areas contaminated with putrescible waste will be washed down at least at the end of each working day. If it is the intent of the Proponent to undertake this activity then it should be assessed for its environmental impact and included in the EIS as per the SEARs requirements for waste handling.

1.4 Management of accumulated dust has not been sufficiently described

Increased waste throughput could result in an increase in dust generation. The EPA is concerned that the Proponent has not adequately described how dust will be managed. The EPA notes that on page 87 of the EIS the Proponent has assessed putrescible waste as having a low potential to generate dust however on previous inspections of the facility EPA officers note that a visible layer of dust can be seen covering services, structures and walls. These observations are mirrored at other facilities that also deal primarily in putrescible waste.

In the absence of a procedure to manage internal dust generation the EPA will be requiring the Proponent to install interior liner panels to facilitate wash down without affecting electrical services.

1.5 No contingencies for an onsite "waste backlog" have been described

In the EPA's experience all waste facilities experience fluctuations in the volumes of waste received at the site from time to time and that these fluctuations can lead to odour impacts offsite. These fluctuations can be caused by:

- queuing of waste vehicles;
- waste volumes accumulating onsite in excess of those volumes modelled in the EIS;
- putrescible waste stored onsite over 24 hours.

Licensees are often not able to control the causes of these fluctuations in waste volumes, however, the EPA expects the Proponent to establish contingency measures to ensure waste is handled (including maximum volumes and storage on site at any one time) appropriately to achieve the projected odour emission rate of 709 OU/s.

The EPA requires more information what contingency measures the Proponent will put in place to deal with fluctuations in the volume of waste received onsite.

2 Noise Impacts

In general the EPA expects that the Proposal will not have a significant noise impact given it is located in a primarily industrial setting with large distances to sensitive receivers. The EPA makes reference to the noise assessment carried by the Proponent. Although generally acceptable, a number of comments are made for your consideration.

Major points of concern, or where the EPA requires further information are included below.

2.1 Noise assessment does not account for 24 hour construction

The EPA notes the EIS states on page 32 that construction of the facility will be undertaken 24 hours a day. Section 6.2.1 noise assessment however states that construction will be undertaken in standard hours.

If the Proponent wishes to undertake construction over 24 hours then the noise assessment will need to be modified to reflect this. However, if this is not the Proponent's intention then the DPE should consider limiting construction hours to standard hours only. Alternatively, the Proponent could clarify what activities will be conducted outside standard hours.

2.2 No assessment of reversing beepers

Through the experience of the EPA reversing beepers at industrial premises can cause significant annoyance at low levels and significant distances, particularly as the Proposal will operate 24 hours a day.

If the Proponent proposes use or accept vehicles and plant onsite that will operate reversing beepers then this should have been explained and included in the noise assessment. If the DPE wishes to approve the proposal without requiring further information, it should consider requiring the use of broadband reversing alarms ("quackers") in place of reversing beepers at the premises.

APPENDIX B – Additional conditions to be placed on the EPA Licence

- A. No putrescible waste to be stored on the premises for more than 24 hours
- B. The licensee must not exceed a daily throughput of 575m³ or 402.5 tonnes of putrescible waste without prior written approval of the EPA
- C. The licensee must install and maintain a weather station for monitoring wind speed and direction
- D. The licensee must conduct daily wash down of areas contaminated with putrescible waste
- E. The licensee must conduct 6 monthly wash down of interior walls
- F. The licensee must install deodourising sprays over all entries and exits to the building
- G. The licence must apply a sealant to the concrete working floor in the Receival hall to prevent the adsorption of leachate into the slab.
- H. The licensee must ensure that all plant and equipment at the premises are fitted with broadband reversing alarms
- I. An air quality and odour management plan for the facility must be developed. The plan must contain, as a minimum the following:
 - a. For all dust and odour emission sources at the site
 - *Key performance indicator(s) for emission controls;*
 - *Monitoring method(s) including location, frequency and duration;*
 - *Response mechanisms;*
 - *Responsibilities;*
 - *Record keeping;*
 - *Compliance reporting.*
 - b. Contingency strategies;
 - c. Complaints register to be reported to the EPA as required in the Annual Return. The register must document investigations undertaken to identify the cause(s) of and action(s) taken to rectify the complaints.
 - d. Communications strategy; and
 - e. System and performance review for continuous improvement
- J. Within 6 months of project approval the proponent must undertake an investigation of best management practice odour mitigation options. The investigation must include:
 - a. The identification of suitable odour mitigation options and controls, including but not necessarily limited to:
 - Mechanical ventilation options;
 - Operation of the building under negative pressure to minimise fugitive emissions; and
 - Odour capture and control options
 - b. Benchmark the identified odour mitigation options against Best Management Practice metrics;
 - c. Evaluation of the feasibility of implementing Best Practice measures; and
 - d. Propose a timeframe for implementing all practicable best practice mitigation measures.
 - e. The methodologies and outcomes of the investigation must be contained in a detailed report submitted to the EPA.