



Our ref: DOC21/370381

The Planning Officer
Department of Planning, Industry and Environment
via the Major Projects Portal

Attn: Ellen Luu, David Schwebel

11 May 2021

Dear Sir/Madam

SSD 10435 – Central Waste Plant Pty Ltd – 8 Styles Street Kurri Kurri – plant expansion

The EPA has reviewed the Environmental Impact Statement (**EIS**) for the proposed development and requires further information and clarification before we can support the proposal.

The proposal is for Central Waste Plant's Resource Recovery Facility at 8 Styles Street Kurri Kurri (**the Premises**) to:

- Increase waste receipt from 90,000 tonnes per year to 300,000 tonnes per year;
- Increase operating hours to include Sundays, operating 24 hours, 7 days;
- Increase the maximum stockpile height from 6 metre to 8 metres; and
- Construction of ancillary and supporting infrastructure.

The assessment of the EIS and appendices primarily relates to the Premises, as it is currently licensed by the EPA and operates as a waste facility under Environment Protection Licence 13013. However, the proposal includes use of 1 Styles Street Kurri Kurri to receive waste, and ancillary activities.

In summary the EPA requires more information and detail on:

- Surface water
- Air Quality
- Waste receipt
- Hours of Operation

Details of the EPA's comments are provided below however the EPA is willing to meet with the applicant to discuss these matters if required.

Surface Water

Construction works

The applicant should develop a sediment and erosion control plan for the construction phase of the proposal and include it in the EIS.

Surface water treatment

Further information is required on the overall surface water controls for the Premises, particularly the specifics of the design and functioning “water management basin”. It is apparent that the current water management basin is functioning as both sediment detention basin and wastewater treatment pit, but both functions may be compromised if using the same pit detention space.

The applicant should also include details of the oily water separator and associated pit which is also functioning to collect sediment laden surface water run-off from the yard.

The applicant should provide detail behind the assumptions of the water management pit/basin volumes and depth (table 5.2 and section 5.4.6 of Appendix K), to determine an appropriately sized surface water treatment system. The applicant should also consider the limitations of the MUSIC modelling system and ensure variables such as evaporation/absorption of water used for dust suppression are accounted for.

The applicant is encouraged to provide further detail on the exact location and circumstances in which samples were taken from the wastewater management basin (e.g. which stage in the treatment process, and location before or after dosing chamber). The applicant should consider a chamber in the wastewater management system to allow for settlement time of sediment and pollutants after dosing with flocculants.

Further information is required to demonstrate how the wastewater treatment plant removes phosphorus from the collected yard surface water.

Catchments

The EPA encourages the applicant to consider separation of “clean” and “dirty” water on site, in particular, storage of collected roof water for reuse. This will alleviate load on the treatment of surface water collected from waste handling areas of the yard.

More information is required to clarify surface water fall or catchments within the Premises (fig 5.2 on Appendix K). It appears the western section of the Premises (including driveway) falls to the south, compared with the majority of the yard. The applicant should detail surface water controls for those parts of the yard which do not fall to the water management basin and are likely to be impacted by entry and exit of waste vehicle movements and other waste, or stored chemicals.

The applicant should consider the merits of a wheel wash for the Premises as part of the proposal.

Firewater tanks (standby and waste fire water)

The EIS refers to 2 rainwater storage tanks in the west of the site for use in firefighting, a fire-water collection tank in the north of the site and, the surface water management system in the east of the site.

The applicant should provide further details of the interaction and controls of these systems, in particular the (spent) fire water tank and the surface water management basin, as they both collect surface water from the open areas of the majority of the yard. Consideration should also be given to control of fire water which may be generated in the west of the site that does not fall to the eastern basin.

Engineered or automated controls are preferred over manually operated controls if switching water flow.

Fuel and chemical bunding

The EPA is aware of a large above ground diesel fuel tank currently at the Premises (contrary to the EIS). The applicant should address the risk of tank failure, spills from the tank or from fuelling activities, and accidents/incidents. Similar consideration should be given to other chemicals which may be stored and used for plant and equipment maintenance and risk to surface water discharge.

Inclement weather and flooding

While the plant and waste storage bays are proposed to be covered, the applicant is encouraged to address environmental impacts from inclement weather and flooding, particularly where there is a risk of waste (whether in storage bays or not) being mobilised, given limitations that may be experienced with response time in extreme conditions. The applicant should explain logistics of waste receipt and handling in these conditions, and the option of restricting entry to vehicles, or alternatives.

If the wastewater management basin is intended to hold surface water for treatment and then reuse, it is not feasible to also have it available for flood storage functions. The applicant should consider revision of this aspect of the proposal.

Maintenance of controls

The applicant is requested to provide information in the EIS on the maintenance of surface water controls (e.g. the wastewater management system, pit desludging, sweeping) and consider increasing the frequency of controls such as in-yard sweeper to reduce load on the wastewater management system.

Safety and security

The applicant is encouraged to consider securing the north east corner of the site and/or addressing the hazard of the water treatment basin which may be accessible from the adjoining vacant property.

Air Impacts

The EPA is unable to verify that air quality impacts will be managed without further information. The AQIA predicts significant incremental impacts of dust (PM10 – 24 hour average) at nearby industrial receptors. Additionally, the EPA has identified that there are issues and information deficiencies with the AQIA that must be addressed, prior to supporting the proposal. The issues are detailed in Attachment A.

Waste Receival and Management

The proposal briefly discusses the proposed operation in which waste laden vehicles enter 1 Styles Street Kurri Kurri (**1 Styles Street**), stand in waiting and checking bays before progressing to 8 Styles Street where the loads are weighed, and waste is unloaded. The applicant should be aware that any waste received at 1 Styles Street as described in the proposal, is subject to licence threshold in accordance with Schedule 1 of the *Protection of the Environment Operations Act 1997*. The premises at 1 Styles Street is not licensed to receive, store, process or recover waste. Any proposed licensed activities are to be undertaken at the Premises.

The applicant should demonstrate how they will comply with the EPA's "Standards for Managing Construction Waste in NSW, 2019" including a designated "tip and spread" area for inspecting incoming loads (both mixed waste destined for the Resource Recovery Facility, and soil/masonry based waste).

The EPA notes the applicant has considered Fire+Rescue NSW's *Guideline on Fire Safety in Waste Facilities* (2020) in the proposal.

Hours of Operation

The EPA notes that the applicant proposes to operate the facility 24 hours 7 days a week. While restricted operations are proposed for Sundays, further justification is required to allow any work being conducted on Sundays there would be 24 hour operation on the other six days of the week.

If you have any questions about this, please contact Melissa Moore on 02 4908 6892.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'S. James', written over a circular stamp or seal.

STEVEN JAMES

**Unit Head Regulatory Operations Metro North
Environment Protection Authority**

Attachment A – EPA detailed review of Central Waste Station AQIA

Significant incremental dust impacts predicted

Incremental pm₁₀ (24-hour) dust impacts of up to 24.4 ug/m³ are predicted at industrial receptors (Receptor 27) nearby to the facility. Furthermore, for peak day operations, cumulative impacts above the EPA's PM₁₀ (24-hour) criterion are predicted as follows:

- five additional exceedance days predicted at industrial receptor R27;
- two additional exceedance days predicted at industrial receptor R26; and
- one additional exceedance day predicted at industrial receptors R18, R21, R29 and R30.

While there are no cumulative exceedances predicted at any surrounding residential assessment locations, the assessment indicates incremental impacts from the change in operations are likely to be significant. As such, additional mitigation measures should be considered.

The report identifies emissions from vehicle movements and external concrete crushing and soil screening have the highest potential for impacts at neighbouring industrial locations. The EPA notes that the AQIA has adopted conservative assumptions. However, based on the significant increments predicted, it is considered reasonable to request that all feasible emission controls, in addition to those presented in the AQIA, be considered in the final design of the facility. Such measures may include engineering controls, such as enclosures, for mobile crushing and screening activities. Vehicle tracking of dust deposited on the hardstand area also presents a potential source of dust emissions. As the expected number of truck deliveries and volume of waste processed are significantly increasing, the potential for dust tracking also increases. While it is noted a sweeper is used to remove debris, further control options, such as a wheel wash should also be considered.

These measures are consistent with best practice management for RRF and should be adopted where feasible.

The EPA recommends:

- 1) the AQIA be revised to consider additional engineering controls in the final design of the facility to ensure particle emissions are minimised as far as practicable. Such measures should include, but not limited to, wheel wash stations and enclosures for crushing/ screening activities.**

Uncertainty associated with adopted emission rates

The EPA notes the following information issues with the predicted emissions which add to the uncertainty associated with the assessment:

- a. Particulate emissions from soil screening are reported as the highest ranking emission source (Table 6.3). However, this figure does not match the data presented in Table B.2, and the EPA was unable to confirm how the value had been derived using the data provided.
- b. Vehicle movements are a significant source of emissions for the proposed development. However, there is insufficient information provided to allow the EPA to confirm the calculations presented in Tables B.1 and B.2 of the assessment. We understand that a factor of 1.3 has been applied to the average number of truck movements, based on historical weighbridge data. However, it is not discussed how the average daily truck movements have been calculated. Furthermore, there is no discussion about truck capacities and expected load weights for material entering and exiting the premises.
- c. Table 6.3 presents emission rates as kg/annum, however the data provided in the table is presented as kg/day. Noting the above-mentioned uncertainties and to ensure accurate, transparent data is being considered, we recommended the correct units/rates be presented and used consistently throughout the AQIA.

The EPA recommends the AQIA be revised to:

- 2) ensure all emissions rate data is presented accurately, including emissions for soil screening activities.**
- 3) include all pertinent information used to calculate emissions from vehicle movements during peak operations. At a minimum, the method used to determine average truck deliveries, net truck weights and loads be provided.**
- 4) ensure the correct units and emission rates are presented and used consistently throughout the AQIA.**

Adequate justification for adopted levels of controls has not been provided

Section 6.3 of the AQIA states that an 83% reduction has been applied for ducting processing line emission sources to filters. There is no discussion on the type, size or emission performance of the filter or any discussion about the discharge (type, orientation or configuration) of the filtered air to atmosphere. Additionally, we note that a high level of control of 94.12% has been applied for soil screening activities. This level of control has not been adequately justified.

The EPA recommends the AQIA be revised to include;

- 5) Further information regarding the filter system used to control emissions from the processing line. The information should describe all inputs to the filter, the expected emission performance of the filter and source release parameters.**
- 6) Adequate justification for the level of emission control applied to all activities, including soil screening.**