

Our Ref: SSD 9409987

Mr Stephen Barry  
Planning Director – NSW Independent Planning Commission

6 December 2024

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**Subject:** Moss Vale Plastics Recycling Facility (SSD 9409987) – Response to Question on Notice

Dear Mr Barry

During the online public meeting of 12 November 2024 for the Moss Vale Plastics Recycling Facility, the Department committed to providing further information to the Independent Planning Commission (the Commission) relating to the length of time the roller doors on the western side of Building 1 would be open and whether the Department's assessment and conclusion remained the same based on this duration. In its presentation at the online public meeting, the Applicant advised these roller doors would be open for a total of five hours per day to allow for delivery of waste plastic.

It should be noted that this five hour timeframe does not align with the Department's understanding of the door opening timeframes provided in the Applicant's Environmental Impact Statement (EIS) which formed the basis of its assessment.

### Further Information

The Department has sought further clarification from the Applicant's consultant GHD around vehicle access door opening times. A copy of GHD's response (dated 15 November 2024) is attached. Importantly, the response revised GHD's advice from the public meeting and clarified that the total door open time would not be five hours per day and is actually predicted to be 42 minutes per day in total. The 42 minute timeframe assumes the doors would be open for a total of 50 seconds per truck under a worst case scenario of 50 trucks per day when the site is operating at full capacity of 120,000 tonnes per annum.

- 50 seconds per truck = 30 seconds (truck arrival) + 20 seconds (truck departure)
- 50 trucks x 50 seconds per truck = 42 minutes per day

Waste plastic would only be delivered to the site between 7am and 6pm Monday to Friday. Outside of this time, while the facility is operating the roller doors would be kept closed at all times.

### Department's Assessment

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The Department's consideration of noise and air quality for the development noted the public's concerns raised in submissions. The Department's assessment was based on information provided in the application documentation and advice received from the NSW Environment Protection Authority (EPA) and is documented in its Assessment Report dated October 2024.

### **Operational Noise**

The Applicant's Noise Impact Assessment (NIA) provided with the EIS included modelling of a scenario where four roller doors (Building 1 – one door in each of the eastern and western façade + Building 2 – one door in each of the southern and western façade) are open 10% of the time during waste receipt hours (10% of 11 hours per day = 66 minutes per day). This assessment predicted the energy average operational noise level over a 15 minute assessment period (denoted as  $L_{Aeq,15min}$ ) of, for example, up to 39 dB(A) at 72 Beaconsfield Rd and up to 34 dB(A) at 50A Bulwer Rd could comply with the EPA's project noise trigger levels of 41 dB(A) and 40 dB(A), at each respective residence (noting these residences were deemed potentially most affected by noise from the development).

Following review of the EIS, the Department requested the Applicant provide additional information to clarify certain noise model inputs. However, the Applicant's response did not adequately address the queries raised. As a result, the Department issued further requests for clarification on limitations and assumptions in the noise assessment, specifically:

- how noise egress from the warehouse buildings would be controlled to ensure it does not exceed 85 dB(A) across the building envelope (e.g. façade openings)
- how rooftop skylights and windows (used for ventilation) had been modelled, noting that noise can more easily transmit through these building elements as the material density of glass is lower than for the wall and roof structures
- how the various heavy vehicle manoeuvres, such as acceleration and reversing movements, had been modelled

Additionally, the Department requested the Applicant conduct a sensitivity analysis to assess the likely noise impact under the scenario where all roller doors are open over a 15 minute assessment period.

It is important to note, that under its regulatory framework for industrial noise, the EPA has set the sampling period for noise to be 15 minutes measured during the times when maximum impacts occur (refer to Section 2.2 and Table A1 of the *Noise Policy for Industry*). To minimise the likelihood of actual noise limit exceedance during operation, it is standard practice for the Department to request that

Applicants consider a worst case noise emission scenario. In the case of this development, the Department requested that the modelling assume the roller doors could be open for the entire 15 minute period.

The Department also requested the Applicant to update its model to account for a potential scenario whereby the maximum number of trucks per hour (5 trucks) are onsite and the roller doors are open during the same 15 minute assessment period. These requests were made to ensure a robust assessment (worst case scenario) based on the Department's extensive experience in assessing and regulating industrial developments across NSW.

The Applicant subsequently updated its operational noise model, as described in its additional noise assessment dated 30 January 2024. To add rigour to the assessment, the operational noise model was updated to include the following items which more realistically reflect the proposed operation of the development:

- closed skylights in the development's roof structure to better account for potential noise egress paths
- distinct heavy vehicle operations such as idling at weighbridge, forward movement within the site and reverse movement into the warehouse building, which increased the development's overall noise emission compared to assumptions made previously
- a typical heavy vehicle movement scenario, with a maximum of five heavy vehicles entering and exiting the site per hour (equivalent to 1.25 heavy vehicles in any given 15 minute period)
- a worst case heavy vehicle movement scenario, with five heavy vehicles performing various operations on the site within the 15 minute assessment period, noting that the development can only facilitate plastic waste drop off by three heavy vehicles simultaneously (given there are only three access doors at the plastic drop off areas)
- all western roller doors opened during any given 15 minute assessment period

Compared to levels reported in the EIS, the updated model predicted worst case operational noise at 72 Beaconsfield Rd and 50A Bulwer Rd to be 2 dB(A) and 5 dB(A) higher, respectively. Despite this increase, the Applicant's updated noise assessment demonstrated that the operation of the development can still comply with the relevant project noise trigger levels noting the above mentioned conservative nature of the assessment.

To ensure the Applicant operates the development in a manner that ensures it would not exceed its assumed worst case scenario, the Department conservatively recommended the following conditions:

- roller doors to be kept shut when not in use (Condition B57(b)) – i.e. can only be opened for entering and exiting trucks
- restricting heavy vehicles to two egressing per 15 minute period (Condition B57(c)) – to ensure that actual operations align with the outcomes of the sensitivity analysis

It should be noted that the additional information provided by GHD on 15 November 2024 clarified that the roller doors would be open for considerably less time (maximum of 30 second bursts at a time) than was assumed for the sensitivity analysis (15 minute conservative modelling whereby the doors were assumed to be open for the whole period) and also less than in the original NIA (10% of an 11 hour day).

Accordingly, the Department finds the conclusions documented in its Assessment Report dated October 2024 remain valid and that the likely noise impact associated with operation of the development is considered acceptable in line with the EPA's *Noise Policy for Industry*. The EPA also accepted the predicted outcomes and recommended operational noise limits.

Further, in relation to the online public meeting and the question asked by the Commission, I made reference to recommended conditions that require the facility to stop operating while roller doors are open. I wish to clarify that the conditions (B44(d) and B57(b)) actually make reference to the doors needing to be shut while they are not in use, rather than the Applicant only being able to operate if the doors are shut. So, in conclusion, I wish to clarify that the roller doors are to be open only when needed for operational purposes such as truck access.

## **Air Quality**

The Applicant has advised the industrial buildings would operate under negative air pressure, which is common in waste facilities to prevent air quality impacts. In a negative pressure environment, exhaust systems remove air, which creates lower air pressure within the building than the air pressure outside. This air pressure gradient means that, when doors open, air flows from the higher pressure outside into the lower pressure inside. A negative air pressure environment therefore ensures that particles in air, including microplastics, remain inside the buildings even when doors are open.

As noted above, the roller doors on the western side of Building 1 are only predicted to be open for a total of 42 minutes per day (30 seconds maximum at a time) when trucks are delivering waste. While the Department acknowledges the community concern that plastic, including microplastic could 'blow out' of the facility if the doors are open, this would be unlikely to occur due to negative air pressure within the building.

Furthermore, as noted in the Applicant's Technical Report – Air Quality and Odour (Chapter 5), all activities with the potential to generate emissions (particulate matter (PM) including microplastics and Volatile Organic Compounds (VOCs)) would be controlled via capture of emissions and piping to an air pollution control system for staged treatment before being discharged via one of the roof stacks. Emissions from operations would be contained by the air pollution control system and would not be released within the building.

As noted in the Department's Assessment Report, air quality assessment of emissions from the stacks predicted pollutants of concern (PM and VOCs) to be below the relevant impact assessment criteria from the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW*.

The Department conservatively recommended the following conditions, among others, to add an extra layer of certainty for the community regarding air quality:

- roller doors to be kept shut when not in use (Condition B44(d)) – i.e. can only be opened for entering and exiting trucks
- verification of actual air emissions on three occasions following commencement of operations (Condition B47) – to ensure that actual emissions align with predicted

The Department reaffirms that the conclusions documented in its Assessment Report dated October 2024 relating to air quality impacts remain valid.

Should you have any questions in relation to the Department's response, please contact me on [REDACTED] or at [REDACTED]

Yours sincerely

[REDACTED]

Chris Ritchie

**A/Executive Director  
Energy, Resource and Industry Assessments**