133 Castlereagh Street, Level 15 Sydney, New South Wales 2000 Australia ghd.com



Your ref: [0000] Our ref: 12524108

15 November 2024

Independent Planning Commission via submissions@ipcn.nsw.gov.au

Attention: Mr Kendall Clydesdale

Moss Vale Plastics Recycling and Reprocessing Facility - potential air quality assessment impacts on residents

Dear Kendall

During the Public Meetings held by the Independent Planning Commission for the Moss Vale Plastics Recycling and Reprocessing facility, the issue of potential air quality impacts on residents of Moss Vale and the broader Wingecarribee Local Government Area was raised. A number of people expressed concerns about perceived impacts on schools, child care centres, sporting ovals, agricultural businesses, wineries and private dwellings, both locally and significant distances from the site.

Air quality impacts of the proposal

The detailed air quality assessments¹ undertaken for the proposal predicted no exceedances of the NSW Environment Protection Authority's (EPA) air quality criteria at any residential property near the site, nor further from the site.

Due to best practice design and pollution controls, predicted incremental concentrations from the proposal only are 1% of the annual average $PM_{2.5}$ criteria and cumulative concentrations are 86% of the $PM_{2.5}$ criteria (of which 85% is existing background air quality). Based on these results, the proposal is unlikely to result in any adverse air quality impacts for nearby residents or Australian Bioresources, the closest commercial receptor.

Advice to stay indoors

During the Public Meetings, in written submissions and in the media, a number of people have commented that the proposal requires residents to stay indoors to minimise the impacts of air emissions from operation of the facility. This comment is not supported by the technical air quality assessments undertaken.

The actual wording in the technical report – *Moss Vale Plastics Recycling and Reprocessing Facility* – *Response to Submissions* – *Air Quality (Appendix J in the Response to Submissions Report)* is as follows:

'The predicted maximum 24-hour average impact is presented in Table 11 for the most affected commercial receptor and most affected residential receptor. The impact is shown as the maximum concentration resulting from a contemporaneous assessment of impacts in accordance with the Approved Methods.

The impact assessment predicts an exceedance of the criterion at the most affected commercial receptor (Australian Bioresources) only. No exceedances of the criterion are predicted at the most affected residential receptor.

→ The Power of Commitment

¹ Technical Report 3 – Air Quality and Odour (25 January 2022), Appendix J - Moss Vale Plastics Recycling and Reprocessing Facility

⁻ Response to Submissions - Air Quality (10 March 2023), Response to EPA comments (5 September 2023)

Table 11 24-hour average PM_{2.5} impacts

Most affected receptor	Predicted ground level concentration (µg/m³)			
	Background	Increment	Total impact	
Commercial	24.5	4.6	29.1	
Residential	24.5	0.0	24.5	

Given the predicted exceedance at the most affected commercial receptor, additional assessment was completed as presented in Table 11.3 of the Approved Methods. This assessment is shown in Table 12 below.

The results presented in Table 12 show that only one exceedance of the PM2.5 24-hour average criterion is predicted. This exceedance occurs on a day (9/04/2018) where the background concentration was approximately 98% of the criterion (24.5 μ g/m³).

Date	Concentrations ordered by highest background (µg/m³)			Date	Concentrations ordered by highest increment (µg/m³)		
	Background	Predicted increment	Total impact		Background	Predicted increment	Total impact
9/04/2018	24.5	4.6	29.1	25/05/2017	5.3	11.8	17.1
14/08/2017	20.9	0.5	21.4	17/05/2018	6.2	11.3	17.6
27/05/2018	20.2	0.4	20.6	23/06/2017	8.1	10.7	18.8
11/05/2017	19.2	3.1	22.3	23/05/2018	7.3	10.6	17.9
26/05/2018	19.0	1.4	20.4	22/06/2018	9.8	9.9	19.7
2/08/2018	18.3	3.0	21.3	9/10/2018	4.6	9.7	14.3
29/07/2017	16.8	4.0	20.8	19/05/2018	4.1	9.4	13.5
29/12/2018	16.3	2.3	18.6	5/06/2017	7.8	9.3	17.1

 Table 12
 24-hour average PM2.5 impacts

These elevated background concentrations would typically be caused by external sources of particulates such as bushfires, controlled burns, or dust storms, and would only occur infrequently. In such cases, the elevated air quality levels would be communicated in advance of or during the event through the DPE 'Current and forecast air quality' page 2, and **consequently people living near the site would be able to manage their exposure to air quality impacts, through minimising time spent outdoors.** Further it is expected that employees or laboratory mice at Australian Bioresources would ordinarily spend the majority of time in controlled air conditioned environments, and would therefore not be exposed to external, elevated air pollutant concentrations.

Table 12 shows that elevated background concentrations do not coincide with elevated incremental concentrations, and as such the risk of the proposal emissions leading to additional exceedances of the criteria at the Australian Bioresources site is low. This suggests, for this receptor, that the meteorological conditions which are conducive to worst-case impacts from the proposal are not the same as the meteorological conditions during which background air quality is degraded.

The **bolded** text above has been referenced by many community members out of context, as the intention is to refer to the type of advice generally provided by the NSW Government to the community to minimise their exposure to poor quality air during hazard reduction burns and bushfires (see excerpt over page and full information here <u>Health advice | Air Quality NSW</u>).

This did not refer to staying indoors to avoid exposure to emissions from the proposal, which are well below the criteria, even when normal background levels are taken into account.

Extremely poor	 STAY INDOORS with windows and doors closed until outdoor air quality is better and reduce indoor activity. 	 STAY INDOORS as much as possible with windows and doors closed until outdoor air quality is better.
	 If you feel that the air in your home is uncomfortable, consider going to a place with cleaner air (such as an air- conditioned building like a library or shopping centre) if it is safe to do so. 	 If you feel that the air in your home is uncomfortable, consider going to a place with cleaner air (such as an air- conditioned building like a library or shopping centre) if it is safe to do so.
	 Actively monitor symptoms and follow the treatment plan recommended by your doctor. 	 If you are concerned about symptoms call the 24-hour HealthDirect helpline on 1800 022 222 or see your doctor.
	 If you are concerned about symptoms call the 24-hour HealthDirect helpline on 1800 022 222 or see your doctor. 	 In a health emergency, call triple zero (000) for an ambulance.
	 In a health emergency, call triple zero (000) for an ambulance. 	

NSW Health Air Quality Activity Guide (excerpt), 2024 Health advice | Air Quality NSW

The relevant finding of the Air Quality assessment, reported above is that "No exceedances of the criterion are predicted at the most affected residential receptor".

The air quality assessment, which considers all project emissions, **did not** recommend that residents should minimise any time spent outdoors due to operation of the proposal.

Regards



Copy to: Department of Planning Housing and Infrastructure