



## Port Kembla Milling – Environmental Monitoring Data

Last Updated: 18<sup>th</sup> August 2025

### AIR MONITORING REQUIREMENTS

Port Kembla Milling is required to monitor its emissions to air from its main mill filter stack on an annual basis. EPL No. 20101 provides a licence limit of 20mg/m<sup>3</sup> for total solid particulates (TSP) and the NSW Protection of the Environment Operations (Clean Air) Regulation 2010 provides Group 6 emissions limits for Nitrogen Oxides and Type 1 and Type 2 substances in aggregate.

Stack testing at Port Kembla Milling is undertaken when the plant is milling cement and slag and the results in both of these production modes are presented below.

| Parameter                                 | Unit                | Limit | 2025      |             | 2024      |             | 2023      |             | 2022      |             |
|-------------------------------------------|---------------------|-------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
|                                           |                     |       | Slag Mode | Cement Mode | Slag Mode | Cement Mode | Slag Mode | Cement Mode | Slag Mode | Cement Mode |
| Velocity                                  | m/s                 |       | 10.1      | 9.6         | 9.55      | 8.32        | 8.2       | 7.15        | 4.8       | 6.17        |
| Dry Stack Flow Rate                       | m <sup>3</sup> /min |       | 3233      | 3344        | 3156      | 2886        | 2617      | 2285        | 1575      | 2050        |
| Temperature                               | °C                  |       | 91        | 91          | 95        | 97.6        | 95.9      | 99.8        | 93.5      | 91          |
| Total Solid Particulates                  | mg/m <sup>3</sup>   | 20    | <1.27     | <1.23       | <1.24     | <0.96       | <1.19     | <1.82       | <1.52     | <1.3        |
| SO <sub>2</sub>                           | mg/m <sup>3</sup>   |       | <2.86     | <2.86       | <2.86     | <2.86       | <2.86     | <2.86       | <2.86     | <2.86       |
| NO <sub>2</sub>                           | mg/m <sup>3</sup>   | 350   | 4.46      | 4.58        | 2.05      | 2.05        | 5.33      | 24.44       | 3.67      | 19.55       |
| CO                                        | mg/m <sup>3</sup>   |       | 7.37      | <1.25       | 340.26    | 62.86       | 15.5      | 63.7        | 41.16     | 43.08       |
| Type 1 and Type 2 substances in aggregate | mg/m <sup>3</sup>   | 1.0   | 0.0197    | 0.0054      | 0.0060    | 0.0042      | 0.0087    | 0.02        | 0.031     | 0.013       |

\*\* NM – Not measured

## **NOISE MONITORING REQUIREMENTS**

Port Kembla Milling (PKM) is required to monitor noise levels at three specified locations on an annual basis. These locations have been identified within this report as R1, R2 and R3. EPL No. 20101 provides for noise limits at each of these monitoring locations. Results for the noise monitoring conducted by Port Kembla Milling for the last four years has been presented below for Day, Evening and Night periods.

### **Noise measurement results – Day Time**

| Location | Limit<br>LA <sub>eq</sub><br>dB(A) | 2024 | Comments                                                                                                                    | 2023 | Comments                                                                                                    | 2022 | Comments                                                                            | 2021 | Comments                                                                                                                                                                  |
|----------|------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R1       | 40                                 | 36   | Ambient noise dominated by road traffic noise from vehicles passing. Distant industrial noise, rail traffic. PKM inaudible. | <32  | PKM inaudible and indistinguishable from industrial hum observed at that location.                          | <40  | Mill inaudible and indistinguishable from industrial hum observed at that location. | 40   | 15minute criteria 40dB(A), industrial sources and movements at approx. 51 – 60 dB(A) during the whole measurement. PKM was inaudible and estimated as less than 40 dB(A). |
| R2       | 37                                 | 30   | Distant traffic and industrial noise. Occasional passing local traffic and rail noise. PKM inaudible.                       | <33  | PKM inaudible, typical neighbourhood ambience, including local road and traffic noise.                      | <34  | Mill inaudible and indistinguishable from industrial hum observed at that location. | 33   | 15minute criteria 37dB(A), industrial sources approximately 44-46 dB(A). PKM was inaudible and estimated as less than 33 dB(A).                                           |
| R3       | 35                                 | 30   | Distant traffic and industrial noise. Occasional passing local traffic and rail noise. PKM inaudible.                       | <31  | PKM inaudible, typical neighbourhood ambience, including local road and traffic noise, distant lawn mowing. | <34  | Mill inaudible and indistinguishable from industrial hum observed at that location. | 34   | 15minute criteria 35dB(A), industrial sources approximately 44-52 dB(A). PKM was inaudible and estimated as less than 34 dB(A).                                           |

### Noise measurement results – Evening Time

| Location | Limit<br>LA <sub>eq</sub><br>dB(A) | 2024 | Comments                                                                                                   | 2023 | Comments                                                                                                                                | 2022 | Comments                                                                            | 2021 | Comments                                                                                                                                                                  |
|----------|------------------------------------|------|------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R1       | 40                                 | 35   | Less passing traffic, distant industrial noise occasional rail traffic. Broadband noise indistinguishable. | <32  | PKM inaudible and indistinguishable from industrial hum observed at that location.                                                      | <40  | Mill inaudible and indistinguishable from industrial hum observed at that location. | 40   | 15minute criteria 40dB(A), industrial sources and movements at approx. 50 – 58 dB(A) during the whole measurement. PKM was inaudible and estimated as less than 40 dB(A). |
| R2       | 37                                 | 29   | Distant traffic and industrial noise. Occasional passing local traffic and rail noise. PKM inaudible.      | <33  | PKM inaudible, typical neighbourhood ambience, including local road and traffic noise, cicada noise, birdsong, and dog barking.         | <35  | Mill inaudible and indistinguishable from industrial hum observed at that location. | 37   | 15minute criteria 37 dB(A), industrial sources including BlueScope approx. less than 50 dB(A). PKM was inaudible and estimated as less than 37 dB(A).                     |
| R3       | 35                                 | 32   | Distant traffic and industrial noise. Occasional passing local traffic and rail noise. PKM inaudible.      | <31  | PKM inaudible, typical neighbourhood ambience, including dominant cicada noise, low local traffic noise and one aircraft pass-by event. | <34  | Mill inaudible and indistinguishable from industrial hum observed at that location  | 35   | 15minute criteria 35 dB(A), no industrial sources were observed during the whole measurement. PKM was inaudible and estimated as less than 35 dB(A).                      |

### **Noise measurement results – Night Time**

| Location | Limit<br>LA <sub>eq</sub><br>dB(A) | 2024 | Comments                                                                                                   | 2023 | Comments                                                                                                                                                                        | 2022 | Comments                                                                           | 2021 | Comments                                                                                                                                              |
|----------|------------------------------------|------|------------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| R1       | 40                                 | 39   | Less passing traffic, distant industrial noise occasional rail traffic. Broadband noise indistinguishable. | <32  | PKM inaudible and indistinguishable from industrial hum observed at that location.                                                                                              | <35  | Mill inaudible and indistinguishable from industrial hum observed at that location | 35   | 15minute criteria 40dB(A), industrial sources and movements at approx. 45 – 48 dB(A). PKM was inaudible and estimated as less than 35 dB(A).          |
| R2       | 37                                 | 34   | Less passing traffic, distant industrial noise occasional rail traffic. Broadband noise indistinguishable. | <33  | PKM inaudible, typical neighbourhood ambience, including local road and traffic noise, cicada noise, distant security alarm, birdsong, and dog barking. Aircraft pass-by event. | <34  | Mill inaudible and indistinguishable from industrial hum observed at that location | 31   | 15minute criteria 37 dB(A), industrial sources including BlueScope approx. less than 40 dB(A). PKM was inaudible and estimated as less than 31 dB(A). |
| R3       | 35                                 | 32   | Less passing traffic, distant industrial noise occasional rail traffic. Broadband noise indistinguishable. | <31  | PKM inaudible, typical neighbourhood ambience, including dominant cicada noise, distant security alarm, low local traffic and one aircraft pass-by event.                       | <34  | Mill inaudible and indistinguishable from industrial hum observed at that location | 32   | 15minute criteria 35 dB(A), industrial sources including BlueScope approx. 42-43 dB(A). PKM was inaudible and estimated as less than 32 dB(A).        |

- Note – following a review of data in 2021, the night-time LA<sub>eq</sub> dB(A) 15minute criteria for R3 was amended to 35dB(A).

## **WATER MONITORING REQUIREMENTS**

Port Kembla Milling monitors the quality of the stormwater discharge when there is outflow from the bioretention basin. It is not always possible to collect a water sample from the bio-retention basin and following rainfall events as there may be not enough runoff generated to physically obtain a sample.

EPL No. 20101 requires the stormwater discharge to be monitored for pH. There is no limit specified for pH of stormwater discharge within EPL No. 20101.

Results of stormwater quality monitoring that has been undertaken over the past 4 years are presented below.

| Date     | pH   | Date     | pH   |
|----------|------|----------|------|
| 23/2/22  | 8.7  | 07/06/24 | 7.48 |
| 02/03/22 | 7.8  | 23/05/25 | 8.12 |
| 09/03/22 | 8.4  | 01/07/25 | 8.8  |
| 29/03/22 | 8.4  |          |      |
| 07/04/22 | 7.07 |          |      |
| 03/07/22 | 8.9  |          |      |
| 29/09/22 | 8.3  |          |      |
| 06/10/22 | 7.96 |          |      |
| 21/10/22 | 8.2  |          |      |
| 24/10/22 | 8.4  |          |      |
| 09/02/23 | 7.90 |          |      |
| 14/03/23 | 9.4  |          |      |
| 05/04/24 | 8.7  |          |      |
| 05/05/24 | 7.44 |          |      |
| 12/05/24 | 7.84 |          |      |