

Ellerton Drive Extension

Environment Protection Licence 20852



EPL Monitoring data – November 2018

1 ENVIRONMENT PROTECTION LICENCE – DETAILS

The Environment Protection Licence for the Ellerton Drive Project (No. 20852) can be viewed on the EPA website [here](#).

The Licensee is:

WBHO Infrastructure Pty Ltd
580 St Kilda Road
Melbourne VIC 3004

2 SEDIMENT BASIN DISCHARGE – WATER MONITORING

Under Condition M2.3 of EPL 20852, water must be monitored daily during any discharge.

Four sediment basins were manually discharged during the month of November 2018. Concentration limits are outlined below. The details of monitoring undertaken are provided in Table 1.

| | | |
|------------------------------|-----------------|-------------|
| Concentration limits: | pH: | 6.5 – 8.5 |
| | TSS: | 50 mg/L |
| | Oil and grease: | Not visible |

Table 1 Sediment basin discharge monitoring

| Basin ID | Date | Total Suspended Solids (TSS) (mg/L) | Turbidity (NTU) | pH | Oil and grease | Comments |
|----------------|----------|-------------------------------------|-----------------|------|----------------|------------|
| 700R | 20/11/18 | 7 | 6.84 | 8.11 | Not visible | Discharged |
| | 23/11/18 | 24 | 42.9 | 7.59 | Not visible | Discharged |
| | 24/11/18 | 30 | 44.3 | 7.64 | Not visible | Discharged |
| | 27/11/18 | 11 | 12.81 | 7.08 | Not visible | Discharged |
| 2960L | 20/11/18 | 10 | 8.73 | 8.45 | Not visible | Discharged |
| | 27/11/18 | 19 | 68.6 | 7.72 | Not visible | Discharged |
| 3390L | 27/11/18 | 20 | 14.52 | 8.46 | Not visible | Discharged |
| 3580R (lower) | 26/11/18 | 14 | 9.52 | 7.48 | Not visible | Discharged |
| 3580R (middle) | 26/11/18 | 14 | 17.52 | 8.30 | Not visible | Discharged |

3 DUST MONITORING

Under Condition M2.2 of EPL 20852, dust must be monitored monthly at each monitoring point.

Ten (10) dust monitoring gauges (DMGs) listed on EPL 20852 were in operation during the period October 2018 – November 2018.

Dust samples were collected from gauges at the following locations in November 2018:

- NCA 2 – Sensitive receiver, Stonehaven Circuit
- NCA 3 – Sensitive receiver, Taylor Place
- NCA 4 – Sensitive receiver, Severne St
- NCA 5 – Sensitive receiver, Lonergan Drive
- NCA 6 – Sensitive receiver, Severne St
- NCA 7 – Sensitive receiver, Doeberl Place
- NCA 8 – Sensitive receiver, Barracks Flat Drive
- NCA 8 – Sensitive receiver, Alfred Place

The result of the dust monitoring is provided in Table 1 below.

Table 1 – Dust Monitoring

| | | DMG ID | DMG 01 | DMG 02 | DMG 03 | DMG 04 | DMG 05 | DMG 06 | DMG 07 | DMG 08 | DMG 09 | DMG 10 | |
|--|-------------------------|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| | | EPL identifier | 2 | 4 | 5 | 6 | n/a | 8 | 9 | 10 | 11 | 7 | |
| | | Start date of sampling | 15/10/2018 | 15/10/2018 | 15/10/2018 | 15/10/2018 | 15/10/2018 | 15/10/2018 | 15/10/2018 | 17/10/2018 | 15/10/2018 | 15/10/2018 | |
| | | End date of sampling | 16/11/2018 | 16/11/2018 | 16/11/2018 | 15/11/2018 | 16/11/2018 | 16/11/2018 | 15/11/2018 | 16/11/2018 | 16/11/2018 | 15/11/2018 | |
| Analyte | Unit | Level of concern | LOR | | | | | | | | | | |
| Ash content | g/m ² .month | 4 | 0.05 | 2.43 | 1.79 | 1.37 | 1.29 | 1.19 | 2.29 | 10 | 2.16 | 2.46 | 1.33 |
| Combustible matter | g/m ² .month | n/a | 0.2 | 0.5 | 0.5 | 0.5 | 1.2 | 0.5 | 0.8 | 1 | 1.5 | 0.8 | 0.6 |
| Total insoluble matter | g/m ² .month | 4 | 0.2 | 2.9 | 2.3 | 1.9 | 2.5 | 1.7 | 3.1 | 11 | 3.7 | 3.3 | 1.9 |
| Total insoluble matter (annual average to date) | g/m ² .month | 4 | | 1.9 | 1.6 | 1.9 | 1.3 | 1.5 | 1.9 | 2.9 | 2.1 | 2.1 | 12.2* |

LOR = Limit of reporting

EPL = Environment Protection Licence

NR = No result

* Outlying results were returned from this monitoring point between February and May 2018, contributing to a high annual average result. Outlying results were investigated in consultation with the EPA and Roads and Maritime Services.

4 NOISE MONITORING

Under Condition M2.4 of EPL 20852, noise monitoring at each monitoring point must be conducted monthly.

The noise monitoring results from the nominated monitoring locations are summarised in Table 2 below.

Table 2 Noise monitoring results November 2018

| Noise monitoring location details | Measurement details | | Measured noise levels dB(A) (15 minute sample) | | | | Construction noise dominated? | Description of ambient noise sources | Construction noise generating activities |
|-----------------------------------|---------------------|------------|---|------|------|-------|-------------------------------|--|---|
| | | | LAeq | LA10 | LA90 | LAMax | | | |
| NCA 1 | Date: | 30/11/2018 | 57.0 | 59.5 | 42.5 | 77.1 | Y | Birds | Cars entering and exiting the car park (max) Trucks moving into the site gate adjacent |
| Thomas Royal Gd | Start time: | 4:14 PM | | | | | | | |
| EPL ID: 3 | Run time (min): | 15:00 | | | | | | | |
| | Wind speed: | 3-4 m/s | | | | | | | |
| | Wind direction: | NW | | | | | | | |
| | Temp (°C): | 24 | | | | | | | |
| | Cloud cover: | 4/8 | | | | | | | |
| NCA 2 | Date: | 27/11/2018 | 42.3 | 44.5 | 34.5 | 63.1 | N | Public traffic along Ellerton Drive | Construction traffic along Ellerton Drive Service relocation works to the east |
| Stonehaven Cct | Start time: | 11:59 | | | | | | | |
| EPL ID: 12 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | <1 m/s | | | | | | | |
| | Wind direction: | NW | | | | | | | |
| | Temp (°C): | 20 | | | | | | | |
| | Cloud cover: | 5/8 | | | | | | | |
| NCA 3 | Date: | 27/11/2018 | 55.0 | 59.0 | 40.5 | 74.8 | Y | Resident talking nearby Dogs barking nearby | Noise wall installation works Haul trucks travelling through the cut below |
| Taylor Place | Start time: | 10:38 | | | | | | | |
| EPL ID: 13 | Run time (min): | 15:00 | | | | | | | |
| | Wind speed: | <1 m/s | | | | | | | |
| | Wind direction: | NE | | | | | | | |
| | Temp (°C): | 18 | | | | | | | |
| | Cloud cover: | 4/8 | | | | | | | |

| Noise monitoring location details | Measurement details | | Measured noise levels dB(A) (15 minute sample) | | | | Construction noise dominated? | Description of ambient noise sources | Construction noise generating activities |
|-----------------------------------|---------------------|------------|---|------|------|-------|-------------------------------|--------------------------------------|--|
| | | | LAeq | LA10 | LA90 | LAMax | | | |
| NCA 4 | Date: | 30/11/2018 | 49.8 | 49.5 | 44.5 | 76.8 | Y | Birds | Excavator working on batter |
| Severne Street | Start time: | 10:52 | | | | | | | |
| EPL ID: 14 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | 1-2 m/s | | | | | | | |
| | Wind direction: | NW | | | | | | | |
| | Temp (°C): | 19 | | | | | | | |
| | Cloud cover: | 3/8 | | | | | | | |
| NCA 5 | Date: | 29/11/2018 | 52.7 | 55.0 | 49.5 | 64.1 | Y | | Bridge works (scaffolding, hammering) Earthworks south of the River |
| Loneragan Drive | Start time: | 7:45:00 | | | | | | | |
| EPL ID: 15 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | 3-4 m/s | | | | | | | |
| | Wind direction: | SE | | | | | | | |
| | Temp (°C): | 12 | | | | | | | |
| | Cloud cover: | 0/8 | | | | | | | |
| NCA 6 | Date: | 29/11/2018 | 50.9 | 55.0 | 31.5 | 64.6 | Y | | Rock hammering Construction vehicle traffic on adjacent fill area |
| Severne Street | Start time: | 17:03 | | | | | | | |
| EPL ID: 16 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | 2 m/s | | | | | | | |
| | Wind direction: | E | | | | | | | |
| | Temp (°C): | 21 | | | | | | | |
| | Cloud cover: | 7/8 | | | | | | | |
| NCA 7 | Date: | 30/11/2018 | 64.6 | 68.0 | 57.0 | 72.3 | Y | Birds | Earthworks: Compactor and pad foot roller on fill |
| Doeberl Pl | Start time: | 8:07 | | | | | | | |
| EPL ID: 17 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | Calm | | | | | | | |
| | Wind direction: | Calm | | | | | | | |
| | Temp (°C): | 14 | | | | | | | |
| | Cloud cover: | 7/8 | | | | | | | |

| Noise monitoring location details | Measurement details | | Measured noise levels dB(A) (15 minute sample) | | | | Construction noise dominated? | Description of ambient noise sources | Construction noise generating activities |
|-----------------------------------|---------------------|------------|---|------|------|-------|-------------------------------|---|---|
| | | | LAeq | LA10 | LA90 | LAMax | | | |
| NCA 8 (A) | Date: | 27/11/2018 | 50.8 | 53.0 | 43.0 | 73.2 | Y | Traffic on Old Cooma Road Traffic on Edwin Land Parkway Activities in the park adjacent | Earthworks |
| Alfred Place | Start time: | 11:03 | | | | | | | |
| EPL ID: 18 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | <1 m/s | | | | | | | |
| | Wind direction: | NE | | | | | | | |
| | Temp (°C): | 19 | | | | | | | |
| | Cloud cover: | 4/8 | | | | | | | |
| NCA 8 (B) | Date: | 30/11/2018 | 49.0 | 51.5 | 44.0 | 60.4 | Y | Birds Dogs | Trucks moving past Earthworks to the north |
| Barracks Flat Dr | Start time: | 15:14 | | | | | | | |
| EPL ID: 19 | Run time: | 15:00 | | | | | | | |
| | Wind speed: | 3-4 m/s | | | | | | | |
| | Wind direction: | NW | | | | | | | |
| | Temp (°C): | 24 | | | | | | | |
| | Cloud cover: | 3/8 | | | | | | | |