

Environmental Protection Licence Monitoring Data

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|--|---|---|
| Project name: | WestConnex – New M5 | |
| Licensee | CPB Contractors Pty Limited | |
| Monitoring period | August 2016 | |
| Website: | WestConnex – Explore the Route – New M5 (Beverly Hills to St Peters) – New M5 Resources | |
| Environmental Protection licence number/s: | 20772 | 4627 |
| Premise addresses | WestConnex New M5, between Beverly Hills and St Peters, Beverly Hills NSW 2209 | New M5 St Peters Interchange, 10-16 Albert Street, St Peters NSW 2044 |

Monitoring Type: Water Discharge Monitoring

| Discharge/Monitoring Point | Date sampled | Total suspended solids | | pH | | Oil & Grease | | Monitoring frequency | Comment |
|-----------------------------|--------------|------------------------|----------|---------------|--------|---------------|--------|-----------------------|-----------|
| | | Licence limit | Result | Licence limit | Result | Licence limit | Result | | |
| Water Treatment Plant ARN-1 | 12/08/2016 | 50 | <5 (LOD) | 6.5-8.5 | 6.92 | None visible | None | Each day of discharge | Compliant |
| Water Treatment Plant ARN-1 | 25/08/2016 | 50 | 39 | 6.5-8.5 | 7.6 | None visible | None | Each day of discharge | Compliant |

Monitoring Type: Air Monitoring

| Monitoring Point / EPA Identification point (EPL 4627) | Date | Dust Deposition g/m2/month | Comment |
|--|-------------|----------------------------|--|
| DG1/9 | August 2016 | 3.0 | |
| DG2/10 | August 2016 | 3.5 | |
| DG3/11 | August 2016 | 8.2 | Dust gauge is located towards the base of the landfill pit and may capture dust from landfill closure work. No dust has been observed leaving the site boundary. An additional water cart has been procured to increase dust suppression. Works will be monitored closely for potential dust generation. |
| DG4/12 | August 2016 | 11.5 | Dust gauge is located on the works side of an ~8m high wall. It is believed broom sweeping directly adjacent to the gauge contributed to this result. Current activities are underway to pave adjacent exposed ground. |

Environmental Protection Licence Monitoring Data

Monitoring Type: Ground Water Monitoring

| Date Sampled: 11/08/2016 | Monitoring Point (EPL 4627) | | | | | | | |
|--|-----------------------------|----------|----------|---------|----------|--------------------|---------|------------------|
| Pollutant | 2 (MW1) | 3 (MW2s) | 4 (MW2d) | 5 (MW3) | 6 (MW4b) | Frequency (MP 2-6) | 7 (LP1) | Frequency (MP 7) |
| Alkalinity (as calcium carbonate) (mg/L) | 110 | 340 | 350 | 520 | 72 | Quarterly | 2200 | Quarterly |
| Aluminium (mg/L) | 380 | 200 | 60 | <10 | 1500 | Yearly | 60 | Quarterly |
| Arsenic (mg/L) | 1 | 1 | <1 | 1 | 2 | Yearly | 7 | Quarterly |
| Barium (mg/L) | 44 | 71 | 85 | 100 | 75 | Yearly | 1500 | Quarterly |
| Benzene (mg/L) | <1 | <1 | <1 | <1 | <1 | Yearly | <10 | Quarterly |
| Bicarbonate (mg/L) | 110 | 340 | 350 | 520 | 72 | Quarterly | 2200 | Quarterly |
| Cadmium (mg/L) | <0.1 | | <0.1 | <0.1 | <0.1 | Yearly | 0.1 | Quarterly |
| Calcium (mg/L) | 52 | 130 | 400 | 210 | 13 | Quarterly | 170 | Quarterly |
| Chloride (mg/L) | 1500 | 27 | 5200 | 1800 | 1200 | Quarterly | 750 | Quarterly |
| Chromium (hexavalent) (mg/L) | <0.005 | <0.005 | <0.05 | <0.005 | <0.005 | Yearly | <0.05 | Quarterly |
| Chromium (total) (mg/L) | 2 | 1 | <1 | 12 | 22 | Yearly | 16 | Quarterly |
| Cobalt (mg/L) | <1 | <1 | 1 | 2 | 8 | Yearly | 4 | Quarterly |
| Copper (mg/L) | 8 | 2 | 3 | 69 | 9 | Yearly | 200 | Quarterly |
| Ethyl benzene (mg/L) | <1 | <1 | <1 | <1 | <1 | Yearly | <10 | Quarterly |
| Fluoride (mg/L) | 0.7 | 0.3 | 0.2 | 0.3 | 1 | Yearly | 0.4 | Quarterly |
| Lead (mg/L) | 11 | 1 | 2 | <1 | 4 | Yearly | 57 | Quarterly |
| Magnesium (mg/L) | 110 | 8.5 | 600 | 160 | 66 | Quarterly | 91 | Quarterly |
| Manganese (mg/L) | 1500 | 260 | 410 | 170 | 1800 | Yearly | 230 | Quarterly |
| Mercury (mg/L) | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | Yearly | <0.05 | Quarterly |
| Naphthalene (mg/L) | ND | ND | ND | ND | ND | Yearly | 4 | Yearly |
| Nitrate (mg/L) | 0.15 | 0.009 | 0.007 | 0.02 | 0.082 | Yearly | <0.05 | Quarterly |
| Nitrite (mg/L) | 0.006 | <0.005 | <0.005 | <0.005 | <0.005 | Yearly | <0.05 | Quarterly |
| Nitrogen (ammonia) (mg/L) | 0.15 | 0.85 | 2.3 | 1.8 | 0.13 | Quarterly | 180 | Quarterly |
| Organochlorine pesticides (mg/L) | ND | ND | ND | ND | ND | Yearly | ND | Quarterly |
| pH (pH) (field test) | 6.19 | 6.14 | 6.65 | 6.80 | 5.61 | Quarterly | 7.2 | Quarterly |
| Polycyclic aromatic hydrocarbons (mg/L) | ND | ND | ND | ND | ND | Yearly | ND | Quarterly |
| Potassium (mg/L) | 14 | 23 | 45 | 27 | 11 | Quarterly | 80 | Quarterly |

August 2016 Monitoring data for EPLs 20772 and 4627

Environmental Protection Licence Monitoring Data

| Date Sampled: 11/08/2016 | Monitoring Point (EPL 4627) | | | | | | | |
|---|-----------------------------|----------|----------|---------|----------|--------------------|---------|------------------|
| Pollutant | 2 (MW1) | 3 (MW2s) | 4 (MW2d) | 5 (MW3) | 6 (MW4b) | Frequency (MP 2-6) | 7 (LP1) | Frequency (MP 7) |
| Sodium (mg/L) | 1200 | 43 | 3000 | 1300 | 1100 | Quarterly | 910 | Quarterly |
| Standing Water Level (m) (field test) | 12.94 | 5.35 | 13.29 | 2.36 | 14.58 | Quarterly | - | Quarterly |
| Sulfate (mg/L) | 320 | 43 | 300 | 170 | 440 | Quarterly | 19 | Quarterly |
| Toluene (mg/L) | <1 | <1 | <1 | <1 | <1 | Yearly | <10 | Quarterly |
| Total dissolved solids (mg/L) | 3500 | 500 | 12000 | 4300 | 2900 | Quarterly | 3000 | Quarterly |
| Total organic carbon (mg/L) | 5 | 10 | 4 | 2 | 6 | Yearly | 97 | Quarterly |
| Total petroleum hydrocarbons (mg/L) C6-C9 | ND | ND | ND | ND | ND | Yearly | ND | Quarterly |
| Total petroleum hydrocarbons (mg/L) C10-C14 | ND | ND | ND | ND | ND | Yearly | 310 | Quarterly |
| Total petroleum hydrocarbons (mg/L) C15-C28 | ND | ND | ND | ND | ND | Yearly | 2400 | Quarterly |
| Total petroleum hydrocarbons (mg/L) C29-C36 | ND | ND | ND | ND | ND | Yearly | 120 | Quarterly |
| Total Phenolics (mg/L) | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | Yearly | <0.05 | Quarterly |
| Xylene (mg/L) | ND | ND | ND | ND | ND | Yearly | ND | Quarterly |
| Zinc (mg/L) | 50 | 33 | 60 | 1 | 67 | Yearly | 320 | Quarterly |

*ND = Not detected