PATONS LANE RRC
RESOURCE RECOVERY CENTRE

# SURFACE WATER MONITORING REPORT – DEWATERING EVENT*

*** via LDP2 (HES) and LDP3 (Dam 3)**

**May 7th, 2021**

**Rainfall: 48 mm (72 h prior to sampling) or 52 mm (5 d prior to sampling)**
**Sampled within 24 h of discharge: Yes**
**Horiba U-52 Calibrated: Yes**

**Table 1: NSW EPA Licensing Requirements (No. 20814 – 20/8/2019) - Special Frequency 1[a]**

| Parameter | Units | Analytical Detection Limit (Laboratory LOR) | LDP3 (Dam 3) | S7 Blaxland Creek | LDP2 (HES Gantry) | LDP2 (HES Spillway) | S8 Blaxland Creek | EPL 100th percentile concentration limit | National Water Quality Guidelines[b] |
|---|---|---|---|---|---|---|---|---|---|
| **pH** | | Field Probe | 7.70 | 7.32 | 7.46 | 7.51 | 7.32 | 6.5−8.5 | 6.5−8.5[c] |
| **Total Suspended Solids** | mg/L | 5 | 88 | 187 | 12 | 13 | 14 | 50 | 6−50[c] |
| **Ammonia (as N)** | mg/L | 0.01 | 0.02 | 0.11 | <0.01 | 0.01 | 0.01 | 1.0 | 0.9 (pH 8.0)<br>Varies with pH[d] |
| **Electrical Conductivity (EC)** | µS/cm | Field Probe | 361 | 448 | 639 | 638 | 726 | NSL[e,f] | 125−2200[c] |
| **Total Dissolved Solids** | mg/L | 1 | 836 | 441 | 356 | 366 | 401 | NSL | NGV[g] |
| **Dissolved Oxygen** | % Saturation<br>mg/L | Field Probe | 87.9<br>7.65 | 63.1<br>5.65 | 97.2<br>8.80 | 96.5<br>8.75 | 76.5<br>6.71 | NSL | 85−110%[c] |
| **Total Organic Carbon** | mg/L | 1 | <1 | 10 | 3 | 3 | 13 | NSL | NGV |
| **Potassium** | mg/L | 1 | 1 | 5 | 4 | 4 | 4 | NSL | NGV |

[a] Values for pH and dissolved oxygen represent the mean of three independent measurements at each sampling site. All other parameters are based on a composite grab sample of surface water 10−30 cm depth).

[b] ANZECC and ARMCANZ (2000).

[c] Applicable to coastal lowland rivers.

[d] Refer to Tables 8.3.6 and 8.3.7 of ANZECC and ARMCANZ (2000) to determine the guideline value based on site-specific pH and temperature.

[e] NSL, no specific limit.

[f] Recommended limit of 1600 µS/cm for discharge to Blaxland Creek (or off-site).

[g] NGV, no guideline value.