PATONS LANE RRC
RESOURCE RECOVERY CENTRE

SURFACE WATER MONITORING REPORT – DEWATERING EVENT*

*** via LDP2 (HES), DAM 2A and LDP1 (DAM 6)**

February 7, 2020

Rainfall: 115 mm (5 days prior to sampling) and 65 mm (1 day 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)	LDP1 (Dam 6)	S7 Blaxland Creek	Dam 2A	LDP2 (HES Gantry)	LDP2 (HES Spillway)	S8 Blaxland Creek	EPL 100th percentile concentration limit	National Water Quality Guidelines[c]
pH		Field Probe	7.88	6.55	7.23	7.10	6.98	7.08	6.5−8.5	6.5−8.5[d]
Total Suspended Solids	mg/L	5	213[b]	1540	285[b]	496	715[b]	790	50	6−50[d]
Ammonia (as N)	mg/L	0.01	0.13	0.13	0.15	0.10	0.13	0.10	1.0	0.9 (pH 8.0) Varies with pH[e]
Electrical Conductivity (EC)	µS/cm	Field Probe	1150	426	1070	1140	1100	1070	NSL[f,g]	125−2200[d]
Total Dissolved Solids	mg/L	1	760	277	756	738	723	772	NSL	NGV[h]
Dissolved Oxygen	% Saturation	Field Probe	64.9	73.9	91.3	101	101	81.1	NSL	85−110%[d]
Total Organic Carbon	mg/L	1	8	4	4	3	3	5	NSL	NGV
Potassium	mg/L	1	5	10	4	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] Given that rainfall (115 mm – 5 days prior to sampling) for the dewatering/sampling event was well above the Blue Book design criteria (5-day 90th percentile rainfall of 47.6 mm) AND measures to minimise water pollution were undertaken, the specified concentration limit for total suspended solids (TSS, 50 mg/L) does not apply (see Section L3.1 in the EPL). For context, 326 mm of rainfall was received from midday February 6th to 9 am February 10th, with the whole South Creek catchment in flood.

[c] ANZECC and ARMCANZ (2000).

[d] Applicable to coastal lowland rivers.

[e] 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.

[f] NSL, no specific limit.

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

[h] NGV, no guideline value.