Modification of Development Consent

Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning and Public Spaces I approve the modification of the development consent referred to in Schedule 1, subject to the conditions outlined in Schedule 2.

Chris Ritchie
A/Executive Director
Energy, Resources and Industry
Assessments

Sydney 13 September 2021 File: OBJ14/14437

SCHEDULE 1

Development Consent:	SSD 6666 granted by the Minister for Planning and Public Spaces on 23 December 2020
For the following:	Remediation of the former Hydro Kurri Kurri Aluminium Smelter site including: • excavation of onsite contaminated areas • excavation and treatment of Capped Waste Stockpile (CWS) material • construction of a purpose-built containment cell • placement of contaminated materials in the containment cell • treatment of contaminated groundwater plume originating from the CWS • ongoing management of the containment cell in perpetuity
	Modification 1
Modification Application:	SSD-6666-MOD 1 Modification to: • construct and operate an onsite temporary water treatment system and associated infrastructure, enabling discharge of treated leachate to the existing smelter water management system
Applicant:	Hydro Aluminium Kurri Kurri Pty Ltd
Consent Authority:	Minister for Planning and Public Spaces
The Land:	Land as defined in Appendix 2 of the development consent

SCHEDULE 2

This consent is modified as follows:

1. Insert the following definitions in alphabetical order:

Modification Applications	The document assessing the environmental impacts of a proposed modification of this consent and any other information submitted with the following modifications made under the EP&A Act:

a) Modification Application SSD 6666 MOD 1 prepared by Ramboll and dated June 2021.

TWTP	Temporary Water Treatment Plant

In Schedule 2, Part A: Administrative Conditions

2. Delete condition A2 and replace with the following:

A2. The development may only be carried out:

(a) in compliance with the conditions of this consent;

(b) in accordance with all written directions of the Planning Secretary;

(c) in accordance with the EIS and Response to Submissions;

(d) in accordance with the RAP and CCDDR;

(e) in accordance with the Development Layout in **Appendix 1**;

(f) in accordance with the Modification Applications; and

(g) in accordance with the management and mitigation measures in **Appendix 3**.

In Schedule 2, Part B: Specific Environmental Conditions

3. Insert new Condition B19A immediately after Condition B19 as follows:

Water Treatment Plant Management Plan

B19A. Prior to operation of the Temporary Water Treatment Plant (TWTP), the Applicant must prepare, to the satisfaction of the Planning Secretary, a TWTP Management Plan that includes, but is not limited to, details regarding treatment processes and commissioning and operation stage management protocols. The TWTP Management Plan must be prepared in consultation with the EPA and include, at a minimum:

(a) specifications and final design details of the TWTP, including expected treatment performance for all pollutants of concern;

(b) a TWTP commissioning stage monitoring program that includes:

i. the collection and collation of data on both the influent and treated effluent quality for all pollutants of concern; and

ii. a verification process to ensure that the treated water quality is consistent with the 'Treated Leachate Target Values' (Document: Hydro Kurri Kurri Aluminium Smelter Remediation-Mod-1 (SSD-6666-Mod-1): Additional Information, dated 31 July 2021) before discharge to the North Dam

(c) a TWTP operational stage monitoring program that ensures each treated effluent batch meets <u>all</u> the 'Treated Leachate Target Values' prior to discharge to the North Dam;

(d) protocols and operational rules in the event the treated effluent does not meet <u>all</u> the 'Treated Leachate Target Values' including but not limited to:

i. recirculation through the TWTP

ii. offsite removal by tanker for disposal at a licensed facility

(e) details of the timing and implementation of decommissioning of the TWTP.

4. Insert new Condition B19B immediately after Condition B19A as follows:

Fluoride Treatment

B19B. Prior to operation of the TWTP, the applicant must explore all practical and reasonable treatment measures to reduce specifically the fluoride concentration in the treated effluent from the TWTP to levels consistent with the ANZECC (2000) long term trigger values for irrigation. The fluoride target value in 'Treated Leachate Target Values' (Document: Hydro Kurri Kurri Aluminium Smelter Remediation-Mod-1 (SSD-6666-Mod-1): Additional Information, dated 31 July 2021) must be adjusted to reflect the final target fluoride level following investigation and implementation of further treatment measures.

5. Insert new Condition B19C immediately after Condition B19B as follows:

Irrigation Management Plan

B19C. Prior to operation of the TWTP, the Applicant must prepare, to the satisfaction of the Planning Secretary, an Irrigation Management Plan in consultation with the EPA. The Irrigation Management Plan must include, but is not limited to:

(a) A plan showing the area to be irrigated by treated effluent from the TWTP;

(b) Irrigation rules to ensure that irrigation water quality meets the North East Dam Target Values prior to irrigation (Document: Hydro Kurri Kurri Aluminium Smelter Remediation-Mod-1 (SSD-6666-Mod-1);

(c) Details of ongoing treated effluent quality monitoring, including sample take location and frequency;

(d) Identification of operational triggers (such as 'trigger action response plans') to ensure that the treatment process is functioning correctly and to prevent unacceptable impacts to the irrigated area. Triggers and associated responses must be provided for, but not limited to, the following:

i. excessive saturation of the soil profile (waterlogging);

ii. any surface water runoff of treated effluent from the North Dam; and

iii. any water quality impacts to the downstream receiving environment.

(e) Operating rules to ensure the North Dam maintains a 1 in 5-year rainfall event or 20% AEP design storm capacity;

(f) Develops a Trigger Action Response Plan (TARP) which includes contingencies to identify and manage any unpredicted impacts (such as poor water quality within the North Dam) and ensure corrective actions are implemented. Contingency measures could include, but are not limited to:

i. additional treatment of leachate through the TWTP;

ii. treatment of the North Dam water quality through the TWTP; and

iii. offsite removal by tanker for disposal at a licensed facility.

6. Insert new Condition B19D immediately after Condition B19C as follows:

Water Quality Monitoring Program

B19D. Prior to operation of the TWTP, the applicant must prepare a Water Quality Monitoring Program in consultation with the EPA that informs the Irrigation Management Plan and Trigger Action Response Plans. The monitoring program should include, at a minimum:

(a) water quality monitoring locations (including but not limited to the North Dam and downstream receiving environment)

(b) analyte list for all pollutants with the potential to cause non-trivial harm (including all the 'Treated Leachate Target Values' (Document: Hydro Kurri Kurri Aluminium Smelter Remediation-Mod-1 (SSD-6666-Mod-1).

(c) sampling method for each location

7. Insert new Condition B49A, Condition B49B and Condition B49C immediately after Condition B49 as follows:

Dangerous Goods

B49A. The quantities of dangerous goods stored and handled for MOD 1 must be below the threshold quantities listed in the Department of Planning's Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 at all times;

B49B. Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:

(a) all relevant Australian Standards;

(b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and

(c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management – technical bulletin (EPA, 1997).

B49C. In the event of an inconsistency between the requirements of conditions B49B(a) to B49B(c), the most stringent requirement must prevail to the extent of the inconsistency.

In Appendix 1 Development Layout Plans:

8. Delete the table and replace with the following:

Drawing No.	Revision	Date	Title
Detailed Design Drawings Prepared by GHD (SR 2015-001)			
22-18015-C011	D	04.05.18	Existing Site Plan Sheet 1 of 2
22-18015-C012	F	04.05.18	Existing Site Plan Sheet 2 of 2
22-18015-C013	E	04.05.18	Site Clearance Plan
22-18015-C021	D	04.05.18	General Arrangement Containment Cell
22-18015-C022	F	04.05.17	General Arrangement Access Roads
22-18015-C023	F	04.05.18	General Arrangement Stormwater
22-18015-C024	F	04.05.18	Detail Plan Sediment Basins & Storage Dam
22-18015-C025	D	04.05.18	General Arrangement Final Cap
22-18015-C031	C	04.05.18	Setout Plan Containment Cell and Ponds – Sheet 1 of 2
22-18015-C032	C	04.05.18	Setout Plan Containment Cell and Ponds
22-18015-C041	B	04.05.18	Section A Longitudinal Section
22-18015-C042	D	04.05.18	Section B Longitudinal Section
22-18015-C071	C	04.05.18	Liner Details – Sheet 1 of 3
22-18015-C072	B	04.05.18	Liner Details – Sheet 2 of 3
22-18015-C073	C	04.05.18	Liner Details – Sheet 3 of 3
22-18015-C081	B	04.05.18	Sump Details – Sheet 1 of 4
22-18015-C082	B	04.05.18	Sump Details – Sheet 2 of 4
22-18015-C083	B	04.05.18	Sump Details – Sheet 3 of 4
22-18015-C084	B	04.05.18	Sump Details – Sheet 4 of 4
22-18015-C091	C	04.05.18	Capping Details – Sheet 1 of 2
22-18015-C092	C	04.05.18	Capping Details – Sheet 2 of 2
22-18015-C101	C	04.05.18	Leachate Buffer Storage Dam Details
22-18015-C102	C	04.05.18	Leachate Transfer System Plan and Details
22-18015-C161	B	04.05.18	Vehicle Tracking Plan
22-18015-C163	B	04.05.18	Swale Longitudinal Section – Sheet 2 of 8
Detailed Design Drawings Prepared by Daracon			
1640-009	01	20.04.21	Leachate Pond and Treatment Plant

9. Add the following plan:

Legend

- Project site
- Leachate management infrastructure
  - Leachate storage dam
  - Leachate treatment plant
  - Leachate transfer pipeline
  - Clean water discharge

A4
1:8,000

In Appendix 3 Applicant's Management and Mitigation Measures:

10. Add the following mitigation measures to the table:

Environmental Aspect	Management Measures
General	The TWTP would be serviced as recommended by the manufacturer. In the event that the inspection identified potential operational issues, TWTP operation would be immediately suspended and serviced as soon as practicable. The TWTP would be inspected generally on a weekly basis whenever the TWTP is required to be operated, except during dry periods where there is no water to treat.
Soil and water	The TWTP will be constructed inside a bund designed to contain any spillage/leaks if they are to occur. The Containment Cell Leachate Pond transfer pipe would be inspected on a weekly basis. And damage observed during the inspection would be immediately repaired. Treated leachate will be tested against the target values in Table 2 3 prior to discharge. Treated leachate will not be discharged if an exceedance of any of the criteria occurred. In the event that the two storage dams are at capacity and the four tanks in the TWTP are also full, leachate water will be pumped back into the Containment Cell.
Visual	Mobile lighting installed on the TWTP would be consistent with AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting and would be mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.
Waste	Spent media (GAC, IX resin, zeolite, sand) wastes would be disposed of within the Containment Cell once used/saturated. If they cannot be disposed of within the Containment Cell (such as being generated following the capping pf the Containment Cell) they would be sampled and analysed as per the Environmental Protection Authority Waste Classification Guidelines, then disposed of at a facility licenced to accept them. Sludge would be pumped to a geotube for de watering then disposed of within the Containment Cell. If it cannot be disposed of within the Containment Cell, sludge would be sampled and analysed as per the Environmental Protection Authority *Waste Classification Guidelines* and disposed of at a facility licenced to accept it. Consumables (IBC, Carboys, containers) would generally be returned to the supplier for reuse. Where this is not possible, they will be recycled.