



Hydro Aluminium Kurri Kurri Smelter Remediation

Assessment of Hydro Aluminium Kurri Kurri Pty Ltd Environmental System Compliance in accordance with SSD-6666 (Mod-2) Conditions of Consent

Audit Reference:	HAKK-02
Audit Organisation:	Hydro Aluminium Kurri Kurri Pty Ltd
Auditors:	Barbara Pater, APP (Lead Auditor)
Date of Audit:	26, 27 & 29 November 2024
Draft Report Submitted:	16 December 2024
Final Report Submitted:	5 February 2025



The APP Group

Distribution and Authorisation Record

Revision No.	Date	Issued to	Comments
Draft V1	16 December 2024	Andrew Walker & Leanne Pringle, Hydro Aluminium Kurri Kurri Pty Ltd	Initial draft for review
Final V0	5 February 2025	Andrew Walker & Leanne Pringle, Hydro Aluminium Kurri Kurri Pty Ltd	Final version following client review

This report has been prepared and reviewed in accordance with our quality control system.

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Date: 16 December 2024

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Date: 5 February 2025

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1. Executive Summary

The Hydro Aluminium Kurri Kurri Ltd Pty (Hydro) development project involves the 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 Engineered Containment Cell in perpetuity.

Remediation of the site is now complete with areas being progressively handed over to a new land owner. Hydro will remain responsible for managing the Containment Cell under the Long-Term Management Plan for a 5-year period, and provisionally transfer the area over in full mid-late 2030.

This Audit Report presents the outcomes of the independent environmental audit of the Hydro Aluminium Kurri Kurri Smelter Remediation with an assessment of Hydro Aluminium Kurri Kurri Pty Ltd (Hydro) compliance against the requirements of State Significant Development conditions SSD-6666 (Mod-2), and in accordance with the Department of Planning's *Independent Audit Post Approval Requirements* (IAPAR 2020).

The audit was conducted by The APP Group – HSEQ Systems and Auditing (APP) on 26, 27 and 29 November 2024 with a review of Schedule 2 Parts A, B, C, D, and Appendices of the SSD-6666 (Mod-2) consent conditions. As per Condition C13 requirements, this audit was undertaken within three years of the initial audit (conducted 29, 30 November and 1 December 2021).

The outcome of the audit identified that the project has demonstrated good environmental performance in compliance with the State Significant Development Consent Conditions SSD-6666 (Mod-2) with the following key strengths noted:

- ▶ Strong collaboration between Hydro, Ramboll and Daracon in meeting compliance obligations and understanding of requirements. Good working relationship demonstrated through regular meetings and inspections, development of the Long-Term Management Plan, and current preparations being made for the Remediation Validation Report.
- ▶ Extensive monitoring of the Temporary Water Treatment Plant (TWTP) was well documented. Good record keeping and evaluation of environmental performance with the use of registers for all monitoring and testing results.
- ▶ Work Health and Safety Management Plan was implemented through training and inductions, plant and equipment inspections, weekly safety inspections and Asbestos Awareness Training session by Enviro Pacific (the accredited asbestos supervisor, as well as the TWTP operator).
- ▶ Containment Cell cover crop appeared well established with areas maintained including garden beds, fauna fencing, perimeter road, leachate system, and gas vent. Temporary sediment fencing was still in place at the time of the audit until areas were fully stabilised.
- ▶ Engagement of Humanomics Pty Ltd by Hydro to undertake medicals on personnel before and after working in the capped waste stockpile area. Daracon also undertook a similar process.
- ▶ Only three complaints received over the three-year period, the last in 2023.

The independent environmental audit assessed a total of 125 conditions, comprising of a review of documents and records, interviews of key personnel and a site inspection.

Site inspection

One (1) observation was identified during the site inspection:

- **OBS-01:** Sandbags at the Containment Cell were in disrepair; however, it was confirmed that these were no longer required and will be removed.

Refer to [Section 6.4](#) for further details of the site inspection with photos included under [Appendix G](#).

Findings

A summary of the findings identified during the audit, including opportunities for improvement, are as follows:

Finding No.	Condition	Audit Findings / Recommendation
HAKK-02_NC-01	A2: The development may only be carried out: (a) in compliance with the conditions of this consent	Based on the non-compliances identified against conditions B19 and C6, a non-compliance is triggered against Condition A2(a). Close out of the non-compliances raised at conditions B19 and C6 will automatically address this non-compliance.
HAKK-02_NC-02	B19: Within two months of completion of installation of the stormwater management system or within another timeframe agreed by the Planning Secretary, works-as-executed drawings signed by a registered surveyor must be submitted to the Site Auditor demonstrating that the stormwater drainage and finished ground levels have been constructed as detailed in the CCDDR.	Based on the evidence presented during the audit, it was unable to be verified that the Work-As-Executed drawings were submitted to the Site Auditor within 2 months of the completion of the stormwater management system installation, as required by Condition B19. Given that remediation is now complete, it is recommended to action a lesson learnt to review any areas for improvement and apply to future learnings.
HAKK-02_NC-03	C6: If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review. Note: <i>This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.</i>	Based on the evidence presented, updates to the RWEMP were not submitted to DPHI within 6-weeks of the notified review for Mod-2 updates. Mod-2 was approved March 2022, however the RWEMP (dated 10 August 2023) was not submitted to DPHI until 14 August 2023. Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.

Finding No.	Condition	Audit Findings / Recommendation
HAKK-02_OFI-01	B7: Long-Term Environmental Management Plan Two months prior to the completion of filling of the containment cell, the Applicant must prepare a LTEMP for the containment cell, to the satisfaction of the Site Auditor and the Planning Secretary. The LTEMP must: be prepared by a suitably qualified and experienced person(s) whose appointment has been agreed to by the Planning Secretary	<p>Ramboll is engaged as the Validation Consultant and has developed the Long-Term Environmental Management Plan as approved by the Department, as well as the Containment Cell Management Plan during the construction phase. Ramboll also develops the annual compliance reports which the Department provides acceptance letters in response to the submissions. Approval of Ramboll's position as the Validation Consultant has not been formally received from the Department (although approval was not required). However, based upon Ramboll's continued engagement across the entire project period, it of the auditor's opinion that they are suitably qualified and experienced in accordance with Condition B7(a). In addition, the Department did not comment on Ramboll's suitability to prepare the Long-Term Management Plan in response to its reviews of the document.</p> <p>It is recommended that clarification be sought from the Department to confirm Ramboll's role as Validation Consultant, prior to the finalisation of the Remediation Validation Report as per Condition B10 which states that:</p> <p><i>"the Applicant must submit a Remediation Validation Report (RVR) to the Planning Secretary. The RVR must:</i> (a) <i>be prepared by the appointed Validation Consultant (s) (see Condition B4) to the satisfaction of the Site Auditor."</i></p> <p>Following the audit, clarification was sought from the Department to confirm Ramboll's position as Validation Consultant (as linked to condition B4). The Department responded 19 December 2024 as follows:</p> <p><i>"In regards to condition B4, the approval of the Planning Secretary for the Validation Consultant is not required. I note that the letter from Hydro to the Planning Secretary providing details of the Validation Consultant is dated 23 December 2020, which is prior to the commencement of remediation works. Therefore, the requirements of condition B4 have been met."</i></p> <p>This finding is therefore considered appropriately addressed and its status closed.</p>
HAKK-02_OFI-02	B9: Upon completion of the construction, filling and capping of the containment cell, the Applicant or any succeeding landowner(s) whose landholding includes the containment cell, must: (a) implement the approved LTEMP; and (b) manage the containment cell in perpetuity in accordance with the LTEMP as required by Condition B7.	<p>As part of the long-term management of the containment cell, regular inspections are being actioned, however the completed inspection forms sampled did not include wording specific to the long-term requirements e.g., inspection of fauna fencing. It is acknowledged that inspections of the fauna fencing are only required on an annual basis.</p> <p>However, it is recommended to include more commentary during inspections to demonstrate these areas are being regularly checked in accordance with the LTMP.</p>

Finding No.	Condition	Audit Findings / Recommendation
HAKK-02_OFI-03	B17: Erosion and Sediment Control Prior to the commencement of any remediation works or surface disturbance the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) guideline and the Erosion and Sediment Control Plan included in the RWEMP required by condition C2.	<p>Some of the Daracon inspections noted items as inspected but not compliant with entries unmarked and inconsistent at times.</p> <p>Given that remediation is now complete, it is recommended to action a lesson learnt to review any areas for improvement and apply to future learnings.</p>
HAKK-02_OFI-04	C11: Compliance Reporting Within three months after the commencement of remediation works, and in the same month each subsequent year (or such other timing as agreed by the Planning Secretary), the Applicant must submit a Compliance Report to the Planning Secretary reviewing the environmental performance of the development to the satisfaction of the Planning Secretary. Compliance Reports must be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department, 2020) and must also: <ul style="list-style-type: none"> (a) identify any trends in the monitoring data over the life of the development; (b) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (c) describe what measures will be implemented over the next year to improve the environmental performance of the development. 	<p>Within the Compliance Table A-1, against Condition C11, incorrect references have been allocated to address C11 (a)-(c).</p> <p>It is recommended to update the references within the Compliance Table to clearly state how compliance has been addressed.</p>

Refer to [Section 6.8](#) and the Audit Checklist under [Appendix E](#) for further detail of these findings.

2. Introduction

2.1 Background

The history of the Kurri Kurri Smelter traces back to 1936, with establishment of the smelter site by 1965. Production at the smelter commenced in 1969 reaching its first pot line in 1973 and expanding with a second pot line in 1980. The third pot line reached full production in 1986, however after a change in ownership, hot metal production in the pot lines ceased in 2012 with the official closure of the smelter occurring in 2014.

The early works (prior to demolition) and Stages 1 and 2 of demolition were substantially completed for the Hydro Aluminium Kurri Kurri Smelter prior to the approval of the consent conditions. Remediation of the 2,000-hectre site commenced on 27 January 2021 and primarily consists of the construction of the Engineered Containment Cell (ECC), the excavation of contaminated soils, and the onsite containment of these and non-recyclable waste material against Conditions of Consent SSD-6666 (Mod-2).

Daracon Contractors was awarded the remediation contract in December 2019 to carry out the construction of the Engineering Containment Cell (ECC) and placement of the mixed waste and other materials into the ECC. Practical completion was issued to Daracon 1 August 2024.

The required independent professionals were contracted as per the conditions of consent which included the Validation Consultant – Ramboll Australia Pty Ltd (Ramboll), Independent Engineer – SMEC, and Site Auditor – AECOM.

Remediation of the site is now complete with Hydro Aluminium Kurri Kurri Pty Ltd (Hydro) working towards final land transfers, undertaking ongoing inspections of the containment cell in accordance with the Long-Term Management Plan. Hydro will remain responsible for managing the Containment Cell under the Long-Term Management Plan for a 5-year period, and provisionally transfer the area over in full mid-late 2030. Ramboll is currently preparing the Remediation Validation Report (due February 2025), with the Site Audit Statement and Site Audit Report by AECOM to follow (August 2025).

Hydro engaged The APP Group – HSEQ Systems & Auditing (APP) to undertake this independent environmental audit, conducted on 26 November 2024 (Day one), 27 November 2024 (Day two), with a closing meeting on the 29 November 2024. The audit was conducted within three (3) years from the previous independent audit of remediation works in compliance with SSD-6666 (Mod-2) and carried out in accordance with Condition C13 which states that:

Independent Audit

Within one year of the commencement of remediation works, and every three years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (Audit) of the development. Audits must:

- (a) be prepared in accordance with the Independent Audit Post Approval Requirements (Department 2020);
- (b) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; and
- (c) be submitted to the satisfaction of the Planning Secretary within three months of commissioning the Audit (or within another timeframe agreed by the Planning Secretary).

2.2 Project Details

Project Details	
Project Name	Hydro Aluminium Kurri Kurri Smelter Remediation Project
Project Application No.:	SSD-6666 (Mod-2)
Project Address:	Hart Rd, Loxford NSW
Project Phase:	Remediation complete
Project Activity Summary:	<p>Completion of the following as per the remediation of the former Hydro Kurri Kurri Aluminium Smelter site:</p> <ul style="list-style-type: none"> • 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 <p>With remediation now complete, management of the containment cell is ongoing as per implementation of the Long-Term Management Plan.</p>

Table 1- Project Details

2.3 Audit Team

Details of The APP Group independent environmental auditing team as approved by the Department of Planning, Housing and Infrastructure (DPHI) for this audit are as follows:

Name	Company	Position	Certification
Barbara Pater	APP	Lead Environmental Auditor	Exemplar Global Lead Environmental Auditor – Certificate No. C424613

Table 2- Audit Team

The auditor approval letter from DPHI for this audit is attached as [Appendix C](#). Independent Audit declaration forms are included as [Appendix D](#).

3. Audit Objectives and Scope

3.1 Audit Objectives

The objective of this audit was to undertake the second independent environmental review of the project in compliance with Development Consent Schedule 2, SSD-6666 (Mod-2) Condition C13, and in accordance with the requirements for an independent audit methodology and independent audit report as per the *Independent Audit Post Approval Requirements* (IAPAR 2020).

3.2 Audit Scope

The scope of this audit comprised a review of the Project compliance with Schedule 2 SSD-6666 (Mod-2) conditions Parts A, B, C, and Appendices, including the following:

- ▶ Review of implementation of specific management plans developed for the project (e.g., Containment Cell Long-Term Management Plan),
- ▶ Site inspection conducted on the 26 November 2024
- ▶ Review of the environmental performance on the project
- ▶ Review of environmental records, 26-27 November 2024
- ▶ Interviews with site personnel, 26-27 November 2024
- ▶ Consultation with stakeholders, prior to the audit.

3.3 Audit Period

This was the second independent environmental audit of the project carried out by APP (formerly AQUAS), covering the review of environmental documentation and records within 3-years of the previous audit, conducted on 30 November, 1 and 2 December 2021. It is noted that this report is based on the result of sampling and supplied documentation and records, activities sighted on the date of the audit, 26-27 November 2024, and additional documentation received up until the 4 December 2024. The audit period is therefore defined as December 2021 to December 2024.

4. Audit Methodology

4.1 Approval of Auditors

Letter from the Planning Secretary agreeing to the auditors is included under [Appendix C](#).

4.2 Audit Scope Development

APP developed the audit scope and a checklist based on the Project Requirements set out in the Development Consent SSD-6666 (Mod-2), Schedule 2 – refer to [Appendix E](#) of this report. Consultation with project stakeholders was also undertaken as part of the scope development as per [Section 4.6](#).

4.3 Audit Process

4.3.1 Opening Meeting

An opening meeting was held with personnel from Hydro, Ramboll and Daracon as per the Audit Attendance Sheet ([Appendix B](#)) on 26 November 2024 at 10:00am.

Key items were discussed as follows:

- ▶ Confirmation of the purpose and scope of the audit
- ▶ Overview of the Project and status of the works
- ▶ Occurrence of environmental incidents and non-compliances, if applicable
- ▶ Overview of the audit process in accordance with the Schedule 2 Consent Conditions and the *Independent Audit Post Approval Requirements* (IAPAR 2020).

4.3.2 Conduct of Audit

Audit activities included the following:

- ▶ Review of the project documentation (Containment Cell Long-Term Management Plan and associated plans) to verify compliance with the SSD-6666 (Mod-2) Schedule 2 conditions,
- ▶ Conduct of a site walk led by Hydro and Daracon to review implementation of mitigation measures and environmental controls.
- ▶ Conduct of the audit based on the checklist with the Conditions of Consent, interviews with personnel and review of records provided as evidence of compliance, and
- ▶ Discussion of any identified findings and actions noted during the site inspection.

4.3.3 Closing Meeting

The closing meeting was held on 29 November 2024 at 11:00am with representatives of Hydro, Ramboll, and APP. General feedback and the audit findings were discussed during the closing meeting.

The APP auditors acknowledged the efforts made in preparing for the audit, hospitality, and openness of Hydro and Ramboll personnel during the conduct of this audit.

4.4 Interviewed Persons

Name and position of persons interviewed:

Name	Organisation	Position
Leanne Pringle	Hydro	Managing Director
Andrew Walker	Hydro	Project Manager
Shaun Taylor	Ramboll	Environmental Scientist
Kirsty Greenfield	Ramboll	Environmental Scientist
Rob Francis	Daracon	Project Manager

Table 3- Personnel Interviewed

4.5 Site Inspection

A site inspection was carried out on 26 November 2024 at 10:30am with representatives of Hydro, Ramboll, Daracon and APP. One (1) observation was identified during the site inspection. Refer to details of the inspection in [Section 6.4](#) of this report and site photos included under [Appendix G](#).

4.6 Consultation

A consultation request was sent via email to the Department of Planning, Housing and Infrastructure (DPHI) in advance of the audit to request feedback on the project as per IAPAR 2020 Section 3.2. DPHI responded to confirm they had consulted with the Industry Assessments team and neither they nor the Compliance Branch have any comments for the audit at this time. Refer to [Appendix F](#) for a copy of the consultation.

4.7 Audit Compliance Status Descriptors

The following audit criteria were used for the rating of audit findings.

Rating	Description
Compliant	The auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.
Non-Compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Not Triggered	A requirement has an activation or timing trigger that has not been met at the time when the audit is undertaken, therefore an assessment of compliance is not relevant.

Table 4- Audit Criteria

In addition to the above descriptors, there was the option to raise Opportunities of Improvement (OFI) during this audit.

5. Document Review

- SSD-6666 Conditions of Consent, Mod-2 approved 4 March 2022
- Containment Cell Long Term Management Plan, 318000980 Containment Cell LTMP V1.1 240903.docx, Revision 1.1 dated 3 September 2024 (Ramboll)
- Hydro Remediation Irrigation Management Plan, 318000737, Rev 2 dated 14 November 2022 (Ramboll)
- Kurri Kurri Aluminium Smelter Gas Monitoring Plan, 318000980 Gas Monitoring Plan_v1.0 240422.docx, Rev 1.0 dated 22 April 2024 (Ramboll)
- Landscape Management Plan Kurri Kurri Smelter Decommissioning, Demolition and Remediation, 31800980, Rev 2 dated 22 April 2024 (Ramboll)
- Water Treatment Plant Management Plan HAKK Temporary Water Treatment Plant (TWTP), Document Number 105079-Q-1000, Rev B2 dated 12 December 2021 (Enviro Pacific Services)
- WHS Management Plan (WHS Plan) – Smelter Demolition and Site Remediation, Rev 12, 6 November 2020
- Temporary Water Treatment Plant Water Quality Monitoring Program as prepared by Ramboll, Rev 1, 14 November 2022
- Biodiversity Management Plan, ref 318000533, Rev 1, 10 August 2023
- Stakeholder and Community Engagement and Notification Plan developed by GHD, ref 22/18982, June 2021
- DPHI letter for IEA to proceed, 15 November 2024
- DPHI letter in response to Compliance Report No. 4. ref: SSD-6666-PA-30, 3 October 2024
- DPHI letter that the submitted TWTP Management Plan satisfies the requirements of the Department, 14 March 2022
- DPHI letter that the submitted TWTP Irrigation Management Plan (Rev 1 dated March 2022) satisfies the requirements of the Department, 1 April 2022
- DPHI letter “Hydro Remediation (SSD-6666) Pre-Construction Studies and Pre-Commissioning Plans”, 22 July 2022
- DPHI letter, approval of revised RWEMP and BMP, ref SSD-6666-PA-19, 1 July 2024
- Ramboll letter “SSD 6666 Hydro Remediation Project: Deferred Surrender of Development Consent (Condition A11)” to DPHI, 30 April 2022
- Ramboll letter “SSD 6666 Hydro Remediation Project: Deferred Surrender of Development Consent – Additional Information” to DPHI, 18 July 2022
- Ramboll letter “SSD 6666 Hydro Remediation Project: Notification of Out of Hours Works”, 14 November 2023
- Ramboll letter “Hydro Aluminium Kurri Kurri EHC Licence: Review of Licensing Requirement” to the EPA, 5 December 2023
- Ramboll letter “Public availability of Audit Report and response”, 14 January 2022
- Ramboll letter ‘Request for IEA waiver’ to DPHI, 15 October 2024
- Cessnock City Council letter in response to LTMP, Ref: DOC2024/011867, 7 February 2024
- Prensa letter “Asbestos Clearance Certificate – Visual Clearance of Decontaminated Machinery used within Hydro Aluminium Kurri Kurri, Hard Road, Loxford NSW 2327”, 13 November 2023
- Email from DPHI to Ramboll, 7 July 2022
- Email from DPHI, 12 December 2023
- Email from DPHI, 23 January 2024
- Email from DPHI, 24 June 2024

- Email from Ramboll to EPA, 20 October 2023
- Email from Ramboll to DPHI, 23 January 2024
- Email from Ramboll to EPA, 14 May 2024
- Email from Ramboll to EPA, 28 November 2024
- Email from Ramboll to EPA, 23 January 2024
- Email from Hydro to Daracon, 18 January 2021
- Email from Hydro to Daracon, 27 December 2023
- Email from Hydro to Daracon, 12 April 2024
- Email from Property Development NSW to Ramboll, 12 December 2023
- Email from Daracon to Hydro, 29 December 2023
- Email from Daracon to Enviro Pacific: “Demobilisation of TWTP – Notice to commence demobilisation – Wednesday 17th April 2024”
- Certificate of Practical Completion for the Engineered Containment Cell (ECC) and Site Remediation issued to Daracon, 1 August 2024
- Portal Receipt SSD-6666-PA-28, 5 October 2024
- Daracon Induction and Training Register
- Daracon Maintenance History Report
- HAKK Site Induction Quiz (Form No. IM-FOR-0203-001, Rev 02)
- Visitors Induction (IM-CHK-0203-002, Rev 05)
- Delivery Driver’s Induction (IM-FOR-0203-015, Rev 03)
- HAKK Daily Log for March and April 2023
- Daracon ITP 1640-ITP-HKK-005/C1-1, 24 June 2021
- Daracon ITP IM-FOR-1411-002 Rev 1, 9 September 2022
- Daracon ITP 1640-ITP-HKK-017_WP-22, 17 August 2023
- Hold Point Notification and release 002, Rev 04, 28 March 2022
- Containment Cell Revegetation Management Report No. 2, October 2024
- ALS WO ES2426804 Certificate of Analysis, 15 August 2024
- ALS WO ES2430547 Certificate of Analysis, 18 September 2024
- ALS WO ES2430547 Certificate of Analysis, 7 November 2024
- EPA notification, 24 August 2024
- Daracon Environmental inspection, 3 August 2023
- Daracon Environmental inspection, 6 October 2023
- Daracon Environmental inspection, 12 February 2024
- Culvert 01 settlement survey – Original Survey 28/05/2020; Recheck Survey 03/06/2021, 1640-012, Rev 01.
- Conformance survey for Sed Basin 1, 26/06/2021, Rev 01
- Conformance survey for Sed Basin 2, 24/04/2021, Rev 01
- TWTP Commissioning Report by Enviro Pacific, Doc No. 105079-RP-001 Rev A, 31 October 2022
- Weighbridge Docket No. DC-069461, 15 August 2023 f
- Central Waste Station Docket No. 174800, 1 December 2023
- Central Waste Station Docket No. 174875, 1 December 2023 (1.30T)
- Central Waste Station Docket No. 175022, 4 December 2023 (0.62T)
- Central Waste Station Docket No. 175375, 7 December 2023 (0.76T)
- Central Waste Station Docket No. 175520, 8 December 2023 (1.56T)
- Central Waste Station Docket No. 175544, 8 December 2023 (1.12T)
- Central Waste Station Docket No. 177951, 15 January 2024 (2.06T)

- Central Waste Station Docket No. 177999, 15 January 2024 (1.12T)
- Waste Classification Report by Enviro Pacific, 14 May 2024
- Cleanaway Docket No. KEM130187066.0, 27 June 2024
- Annual Waste Management Reports 2018 to 2023
- Hydro Inspection, 23 August 2024
- Asbestos Removal Control Plan reference Doc No. EP-HSE-13-FRM-01, 9 January 2023
- Daily Air Monitoring Results by Prensa, Report No. 110516S.022AR, 5 April 2023
- Daily Air Monitoring Results by Prensa, Report No. 110516S.171AR, 1 November 2023
- Gas monitoring - field sheet, 15 August 2024
- HAKK Basin Lining Noise Monitoring Report by Daracon, Issue No. 1, 18 February 2022
- Statement Biodiversity Conservation Fund for an offset obligation dated 5 May 2022, BCT ref BCF353, signed by the NSW Biodiversity Conservation Trust 9 May 2022
- Maintenance History Report for 3842 Komatsu HM400 Truck, 31 October 2023
- Hydro Compliance Report 1, 27 April 2021
- Hydro Compliance Report 2, 30 April 2022
- Hydro Compliance Report 3, 28 April 2023
- Hydro Compliance Report 4, 30 April 2024
- Meeting Minutes No. 64, 4 July 2023
- CWS Waste Cartage Presentation, 26 April 2024
- Coates hire – Metro lighting tower – tax invoice 23227048 received 1 May 2024 for hire period 31 March to 30 April 2024
- JR Richards Report for the period of September 2021 to 31 August 2024
- Ramboll statement ECC Central Vent Gas Monitoring No. 318000344-002, 14 June 2024

6. Audit Findings

6.1 Assessment of Compliance

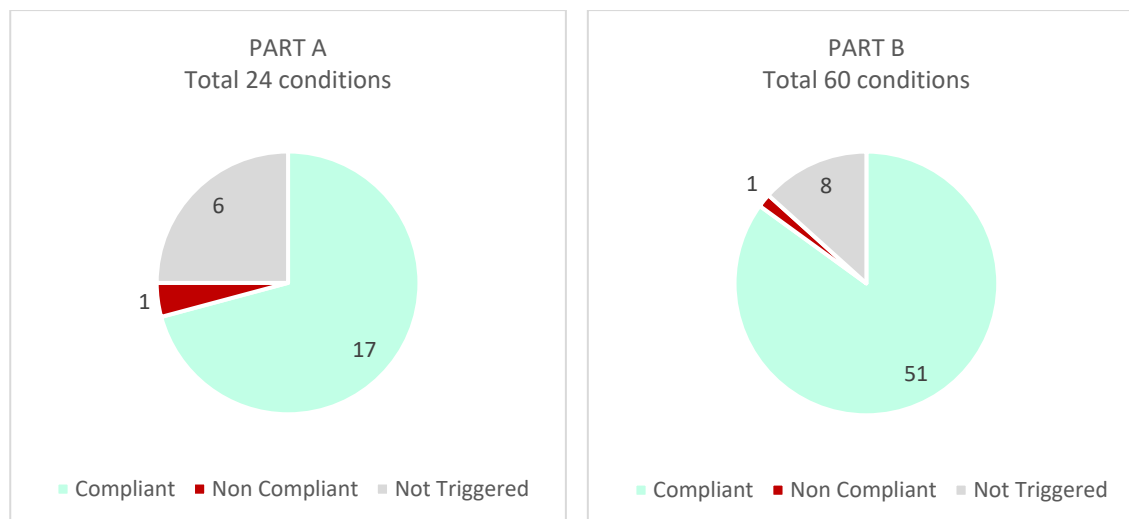
The audit was completed to assess the implementation of the Containment Cell Long-Term Management Plan and associated sub-plans, compliance over the 3-year period, as well as the permanent environmental controls established by Hydro for the Hydro Aluminium Kurri Kurri Smelter Remediation project, against Development Consent SSD-6666 (Mod-2), Schedule 2 (125 conditions).

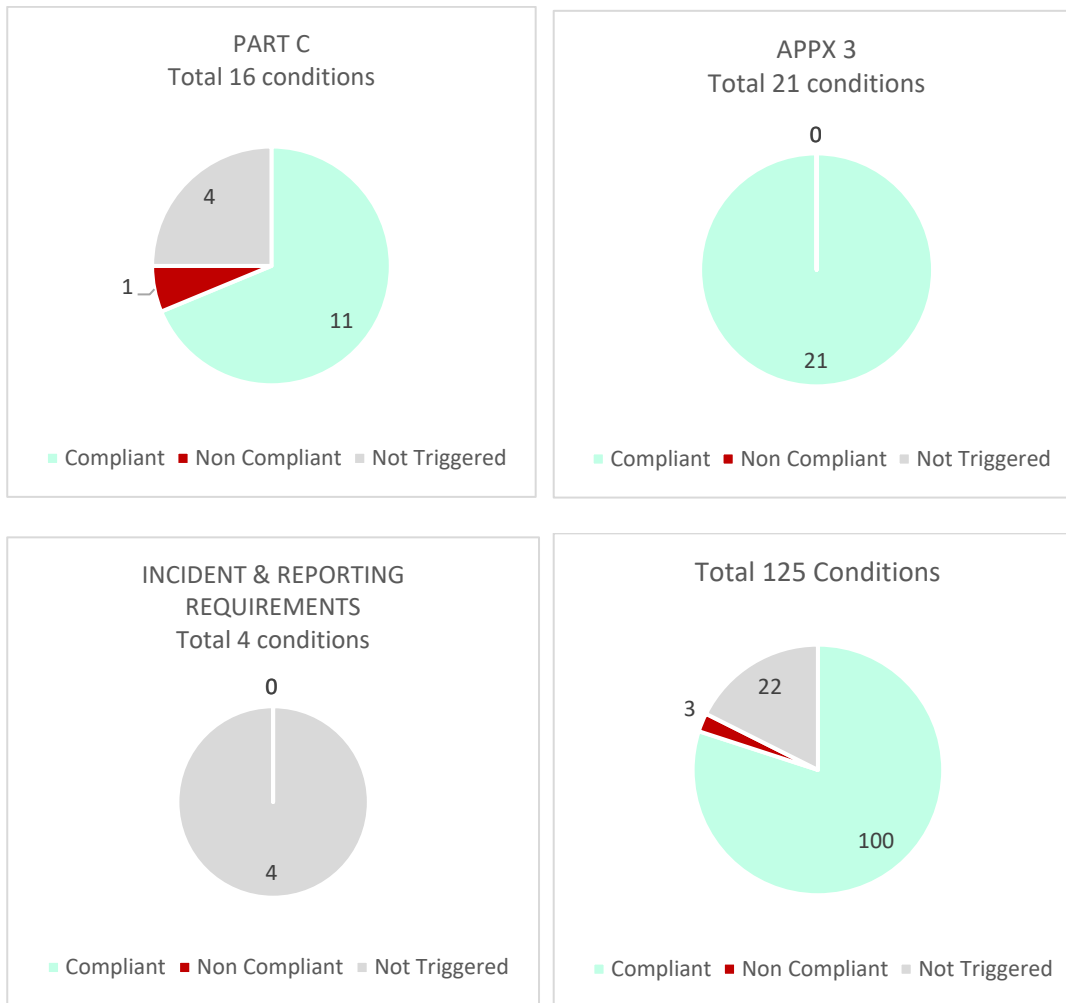
The following table summarises the audit findings by rating category:

Findings Rating	Findings
Compliant	100
Non-Compliant	3
Not Triggered	22
Total	125

Table 5- Summary of Findings

The comparison of audit requirements against the compliance ratings is as follows:





6.2 Notices, Incidents and Complaints

6.2.1 Notices and Incidents

Hydro noted that no agency notices, orders, penalty notices or prosecutions were issued during the audit period. Written directions issued from the Department were complied with as evidenced under Condition A3. No reportable environmental incidents have been recorded to date.

6.2.2 Complaints

A Complaints Register is in place where complaints details are recorded, including resolution reached. Three complaints have been received on the project to date.

1. No. 1 on 23 July 2021 (during previous audit period). Resident concerned about black dust particles on washing and surfaces in home. Explained 5 dust deposition gauges and results within limits and quite low. Investigation found that a water cart had been in operation on roads, with no visible dust emissions. Some residential chimneys were in use nearby. No other obvious sources. Wind was from SW. Resident was advised and the complaint addressed and closed.
2. No. 2 on 28 March 2023 via UGL environment officer working on the Hunter Power Project (which is located on part of the land approved for SSD 6666). Workers complained about dust coming from the 7A furnace building where waste was being loaded into dump trucks. Inspection undertaken; water cart wetted down waste with no further dust observed. Complaint closed. Noted that updated 1 May 2023.

3. No. 3 on 8 July 2023 via UGL environment officer working on the Hunter Power Project. Workers complained about dust coming from containment cell between 9-10am, assumed to be gypsum due to its nature and location. Works were occurring on the weekend, however no waste material was being placed and a water cart did wet down the area afterwards (10:55am), however dust was present again around 1pm. Requested that contractor check weather forecast on weekends and RDOs and have water carts on standby if high winds predicted. Complaint closed.

The complaints register is available on the project website and was noted to be updated monthly.

6.2.3 Non-Compliances

No non-compliances have been raised on the project during the audit period. Refer to [Section 6.8](#) for details of current findings.

6.3 Previous Audit Findings

No non-compliances or improvement opportunities were raised during the previous audit, therefore there are no findings to note.

6.4 Audit Site Inspection

A site inspection was conducted of the completed areas with representatives of Hydro, Ramboll, Daracon and APP to review the remediated areas and effectiveness of environmental mitigation measures implemented.

Containment Cell:

- ▶ Cover crop well established with permanent growth progressing
- ▶ Garden beds installed as designed
- ▶ Former sediment basin has now been filled and grassed
- ▶ Perimeter road was noted to be clear and clean
- ▶ Temporary silt fencing still in place around Containment Cell and at fauna fence until areas are fully stabilised
- ▶ Entry to area was secure with gate locked
- ▶ Access pathway to gas vent was clear and tidy
- ▶ Leachate outlets, infrastructure and tank appeared in good condition
- ▶ Leachate collection tank in bunded area with no sign of spills
- ▶ Pit drain protection in place adjacent to leachate tank
- ▶ Rock lined channel leading into culvert was clean and rubbish free
- ▶ High standard of housekeeping throughout the area
- ▶ One minor observation raised as below.

Other areas:

- ▶ Temporary Water Treatment Plant has been fully decommissioned. Hardstand used for the plant remains and will transfer to the new owner with the land.
- ▶ Sheds used to store potlining and gypsum are now empty with four sheds currently utilised by Tomago Aluminium for the temporary storage of aluminium dross under their EPL (separate to the project).
- ▶ Former Capped Waste Stockpile area has been fully remediated
- ▶ Permanent dam onsite adjacent to Containment Cell (known as the West Surge Pond) appeared clean with pump in place to manage capacity.

- ▶ Secondary dam adjacent to the former Capped Waste Stockpile area (known as the East Surge Pond) also appeared to be in good condition.

One (1) observation was raised during the site inspection as follows:

- ▶ **OBS-01:** Sandbags at the Containment Cell were in disrepair; however, it was confirmed that these were no longer required and will be removed.

Photos of the site inspection are included in [Appendix G](#).

6.5 Suitability of Plans and the Environmental Management System

Following completion of remediation works, a Long-Term Management Plan (LTMP) for the Containment Cell was developed in accordance with Condition B7 of the consent conditions. Consultation was actioned with Cessnock City Council, the EPA, and Property and Development NSW, with Department feedback into the LTMP addressed and resubmitted. As part of the LTMP, a Landscaping Plan and Gas Monitoring Plan were developed and appended as per Condition B8.

Implementation of the plans was a focus during the audit and demonstrated through regular inspections of the area since its completion in August 2024, with an improvement opportunity raised to include more detail into these inspections. Daracon continues to be engaged to implement the Landscaping Plan and provide monthly reports on the status of works. At the time of the audit site inspection, the Containment Cell landscaping appeared to be progressing with the cover crop well established and good weed management.

Prior to completion of the Containment Cell, several plans were in place to mitigate measures during the construction phase. These were mostly unchanged since the previous audit with the Remediation Works Environmental Plan and Biodiversity Management Plan undergoing updates regarding the clearing boundary to align to the Modification 2 (Mod-2) of the consent. Prior to this, Modification 1 (Mod-1) triggered an update to cross reference the Irrigation Management Plan and Temporary Water Treatment Plant (TWTP). Records were presented to demonstrate implementation of these plans included regular inspections of the whole site and specific maintenance records of the TWTP.

The Containment Cell Long-Term Management Plan and associated plans and their implementation were verified during the review of records and as demonstrated during the site inspection – refer to [Section 6.8 – Audit Findings](#) and [Appendix E – Audit Checklist](#).

Based upon the outcome of the audit, the current plans and system were deemed suitable for works at the time of this audit.

6.6 Actual vs Predicted Impacts

Predicted impacts are described in the Environmental Impact Statement (EIS) for the project, prepared by Ramboll dated 14 July 2016 and Response to Submissions (RtS), 21 August 2020 (Ramboll). In accordance with the IAPAR 2020 guidelines, the Lead Auditor has assessed the actual environmental impacts against the predicted impacts as per the EIS. Given the scale of technical studies that supported the preparation of the EIS, it is not possible to determine full compliance to such predictions during this audit, rather the Lead Auditor has adopted a qualitative approach to the comparison.

When comparing actual vs predicted impacts the following factors have been considered:

- ▶ the occurrence of environmental incidents
- ▶ compliance history against the conditions of consent and adherence to the approved management plan requirements
- ▶ results of environmental monitoring data (air quality etc.) compared to predicted levels
- ▶ number of and frequency of internal actions raised during site inspections
- ▶ the nature and frequency of complaints
- ▶ regulatory notices
- ▶ consistency of designs with the EIS; and
- ▶ any planning approval modifications.

6.6.1 Air and Odour

Potential adverse air quality and odour impacts. An Air Quality Management Plan was developed for the remediation works and implemented as per regular inspections which reviewed the conditions on site, weather forecast and noted dust mitigation measures e.g., water carts in use. Water was reused from sediment basins and onsite dams for dust suppression with speed signs onsite to manage vehicle movements. Quarterly gas monitoring was actioned with no triggers to date. Five dust gauges were in use during the works, one more than the original four as predicted. Results for data from January 2018 to November 2023 results were publicly available on the project website with exceedances recorded February 2020 and December 2021 due to bushfires. Two dust complaints were received during the audit period which were adequately addressed and closed out. Refer to [Section 6.2.2](#) for details. Gypsum was unloaded and stored within an enclosed shed (originally constructed for the storage of spent pot lining and designed to minimise dust leaving the shed). At the time of the audit, gypsum was no longer being stored with the shed now empty.

6.6.2 Noise and Vibration

Potential adverse noise and vibration impacts. The nearest receivers to the Smelter are located approximately 270 metres to the south of the Smelter. The Noise and Vibration Impact Assessment prepared for the EIS predicted that it is unlikely that there would be any vibration impacts generated by plant that would give rise to annoyance or structural damage at this or any of the nearest receivers. Vibration monitoring would be undertaken in response to any community complaints as described in the NMP. No complaints have been received in relation to vibration. A Noise and Vibration Management Plan was developed for implementation which details mitigation measures, standard hours, and response to complaints. Out of standard hours work was undertaken for the basin lining works. Three locations monitored (Horton Road, Bishops Bridge Road, and Dawes Road, Loxford) with three exceedances noted; however, it was determined that these were not due to the works and was a result of highway traffic noise, birdlife, frogs and cicadas. No noise complaints have been received to date.

6.6.3 Soil and Water

Erosion and sediment controls were included as part of the regular inspections as evidenced. At the time of the audit, silt fencing was still in place at the Containment Cell until permanent growth is established and the area fully stabilised. There were no incidents of gypsum entering the stormwater system. A site map was presented showing designated refuelling areas. No leaks or material harm incidents reported to the EPA to date.

6.6.4 Hazardous Materials

Potential for generation of hazardous gases and liquids, and potential for exposure during movement of Capped Waste Stockpile materials into the Containment Cell. This was mitigated through implementation of the Work Health and Safety Management Plan and Asbestos Removal Control with mandatory personal protective

equipment for workers including respirators with filter, coveralls, nitro gloves and boots. A decontamination unit was in place and communicated through inductions. As an additional measure, Humanomics was engaged to undertake medicals on personnel prior to and following completion of works (as linked to Human Health impacts). Gas monitoring was undertaken on a quarterly basis with no exceedances triggered.

6.6.5 Transport and Access

Impacts were assessed on surrounding roads for predicted vehicle movements. Existing access to the Kurri Kurri Speedway and Kurri Kurri Junior Motorcycle Club were also considered. A Traffic Management Plan and Smelter Access Plan were developed to outline routes, access, speed limits onsite, and parking. Consultation was actioned with the Speedway as evidenced during remediation of Dickson Road. No complaints or traffic / access incidents have occurred.

6.6.6 Other impacts

- **Aboriginal Heritage:** Located artefact was relocated to Mindaribba Local Aboriginal Land Council during the previous audit period. There have been no further Aboriginal Heritage artefacts or unexpected finds to date.
- **Non-Aboriginal Heritage:** An unexpected finds procedure has been developed. There have been no heritage finds. The project website includes a history of the site and videos with a mural painted by a local artist on Hart Road to celebrate the site's history.
- **Biodiversity:** Clearing was complete during the previous audit period with a Biodiversity Management Plan developed and updated during this audit period to adjust the clearing boundary. All credits have been retired and offsets procured.
- **Visual:** Demolition of the smelter stacks occurred prior to the previous audit period under a development consent granted by Cessnock City Council. The Containment Cell vegetation cover appeared well maintained during the audit with the cover crop established and permanent growth in progress.
- **Greenhouse Gas:** As per implementation of the Energy Efficiency Plan. Remediation is now complete with site shed removed, however evidence of regular plant and equipment maintenance was presented.
- **Waste:** A Waste Management Plan was prepared and describes the methods of transport and disposal with waste to be transported to licensed facilities. Evidence of waste classification and transportation dockets were presented during the audit. Annual waste reports are also publicly available on the project website for spent pot lining in accordance with the EPL (1548). Waste reports were also issued by Daracon for the removal and recycling of construction materials.
- **Cumulative Impacts:** At the time of the audit, Snowy Hydro were onsite for the construction of an open cycle gas turbine power station for the Hunter Power Project. Cumulative impacts are managed through meetings with internal traffic management now managed by Snowy Hydro.

6.6.7 Summary of impacts

Based on the outcome of the audit and controls observed during the site inspection, the Project is noted to have demonstrated a strong level of environmental performance during the audit period, with nil incidents, non-compliances, environmental monitoring results within predicted levels, appearing to effectively implement the environmental management plans to mitigate impacts. In summary, the Lead Auditor considers that the Project's actual environmental impacts are consistent with the potential predictions as outlined in the EIS and RtS.

6.7 Key Strengths

The outcome of the audit identified that the project has demonstrated good environmental performance in compliance with the State Significant Development Consent Conditions SSD-6666 (Mod-2) with the following key strengths noted:

- ▶ Strong collaboration between Hydro, Ramboll and Daracon in meeting compliance obligations and understanding of requirements. Good working relationship demonstrated through regular meetings and inspections, development of the Long-Term Management Plan, and current preparations being made for the Remediation Validation Report.
- ▶ Extensive monitoring of the Temporary Water Treatment Plant (TWTP) was well documented. Good record keeping and evaluation of environmental performance with the use of registers for all monitoring and testing results.
- ▶ Work Health and Safety Management Plan was implemented through training and inductions, plant and equipment inspections, weekly safety inspections and Asbestos Awareness Training session by Enviro Pacific (TWTP operator).
- ▶ Containment Cell cover crop appeared well established with areas maintained including garden beds, fauna fencing, perimeter road, leachate system, and gas vent. Temporary sediment fencing was still in place at the time of the audit until areas were fully stabilised.
- ▶ Engagement of Humanomics by Hydro to undertake medicals on personnel before and after working in the capped waste stockpile area. Daracon also undertook a similar process.
- ▶ Only three complaints received over the three-year period, the last in 2023.

6.8 Audit Findings and Recommendations

Implementation of the Containment Cell Long-Term Management Plan and associated plans were verified to be generally in compliance with Development Consent SSD-6666 (Mod-2). Refer to the attached [Appendix E](#) for full details of the completed audit checklist. Findings raised, including opportunities for improvement, are as summarised overpage.

Finding Ref.	Condition	Audit Findings / Recommendation
Non-Compliance HAKK-02 NC-01	A2: The development may only be carried out: (a) in compliance with the conditions of this consent	Based on the non-compliances identified against conditions B19 and C6, a non-compliance is triggered against Condition A2(a). Close out of the non-compliances raised at conditions B19 and C6 will automatically address this non-compliance.
Non-Compliance HAKK-02 NC-02	B19: Within two months of completion of installation of the stormwater management system or within another timeframe agreed by the Planning Secretary, works-as-executed drawings signed by a registered surveyor must be submitted to the Site Auditor demonstrating that the stormwater drainage and finished ground levels have been constructed as detailed in the CCDDR.	Based on the evidence presented during the audit, it was unable to be verified that the Work-As-Executed drawings were submitted to the Site Auditor within 2 months of the completion of the stormwater management system installation, as required by Condition B19. Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.
Non-Compliance HAKK-02 NC-03	C6: If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review. Note: <i>This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.</i>	Based on the evidence presented, updates to the RWEMP were not submitted to DPHI within 6-weeks of the notified review for Mod-2 updates. Mod-2 was approved March 2022, however the RWEMP (dated 10 August 2023) was not submitted to DPHI until 14 August 2023. Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.

Finding Ref.	Condition	Audit Findings / Recommendation
<p>Opportunity for Improvement</p> <p>HAKK-02</p> <p>OFI-01</p>	<p>B7: Long-Term Environmental Management Plan</p> <p>Two months prior to the completion of filling of the containment cell, the Applicant must prepare a LTEMP for the containment cell, to the satisfaction of the Site Auditor and the Planning Secretary. The LTEMP must:</p> <p>(a) be prepared by a suitably qualified and experienced person(s) whose appointment has been agreed to by the Planning Secretary</p>	<p>Ramboll is engaged as the Validation Consultant and has developed the Long-Term Environmental Management Plan as approved by the Department, as well as the Containment Cell Management Plan during the construction phase. Ramboll also develops the annual compliance reports which the Department provides acceptance letters in response to the submissions.</p> <p>Approval of Ramboll's position has not been formally received from the Department. However, based upon Ramboll's continued engagement across the entire project period, it of the auditor's opinion that they are suitably qualified and experienced in accordance with Condition B7(a).</p> <p>It is recommended, that clarification be sought from the Department to confirm Ramboll's role as Validation Consultation, prior to the finalisation of the Remediation Validation Report as per Condition B10 which states that:</p> <p><i>"the Applicant must submit a Remediation Validation Report (RVR) to the Planning Secretary. The RVR must:</i></p> <p><i>(a) be prepared by the appointed Validation Consultant(s) (see Condition B4) to the satisfaction of the Site Auditor"</i></p> <p>Following the audit, clarification was sought from the Department to confirm Ramboll's position as Validation Consultant (as linked to condition B4). The Department responded 19 December 2024 as follows:</p> <p><i>"In regards to condition B4, the approval of the Planning Secretary for the Validation Consultant is not required. I note that the letter from Hydro to the Planning Secretary providing details of the Validation Consultant is dated 23 December 2020, which is prior to the commencement of remediation works. Therefore, the requirements of condition B4 have been met."</i></p> <p>This finding is therefore considered appropriately addressed and its status closed.</p>
<p>Opportunity for Improvement</p> <p>HAKK-02</p> <p>OFI-02</p>	<p>B9: Upon completion of the construction, filling and capping of the containment cell, the Applicant or any succeeding landowner(s) whose landholding includes the containment cell, must:</p> <p>(a) implement the approved LTEMP; and</p> <p>(b) manage the containment cell in perpetuity in accordance with the LTEMP as required by Condition B7.</p>	<p>As part of the long-term management of the containment cell, regular inspections are being actioned, however the completed inspection form sampled did not include wording specific to the long-term requirements e.g., inspection of fauna fencing. It is acknowledged that annual inspections of the fauna fencing are only required on an annual basis.</p> <p>However, it is recommended to include more commentary during inspections to demonstrate these areas are being regularly checked in accordance with the LTMP.</p>

Finding Ref.	Condition	Audit Findings / Recommendation
Opportunity for Improvement HAKK-02 OFI-03	B17: Erosion and Sediment Control Prior to the commencement of any remediation works or surface disturbance the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) guideline and the Erosion and Sediment Control Plan included in the RWEMP required by condition C2.	Some of the Daracon inspections noted items as inspected but not compliant with entries unmarked and inconsistent at times. Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.
Opportunity for Improvement HAKK-02 OFI-04	C11: Compliance Reporting Within three months after the commencement of remediation works, and in the same month each subsequent year (or such other timing as agreed by the Planning Secretary), the Applicant must submit a Compliance Report to the Planning Secretary reviewing the environmental performance of the development to the satisfaction of the Planning Secretary. Compliance Reports must be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department, 2020) and must also: <ul style="list-style-type: none"> (a) identify any trends in the monitoring data over the life of the development; (b) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (c) describe what measures will be implemented over the next year to improve the environmental performance of the development. 	Within the Compliance Table A-1, against Condition C11, incorrect references have been allocated to address C11 (a)-(c). It is recommended to update the references within the Compliance Table to clearly state how compliance has been addressed.

Table 6- Findings

Appendix A- Audit Agenda



The APP Group

Audit Agenda – Hydro Kurri Kurri Aluminium Smelter Remediation

Project	Independent Environmental Audit – Hydro Kurri Kurri Aluminium Smelter Remediation	
Proponent	Hydro Aluminium Kurri Kurri Pty Ltd	
Location	Hydro Aluminium Kurri Kurri site office	
Date and Time	Day One: 26 November 2024 (onsite)	10:00 AM – 3:00 PM
	Day Two: 26 November 2024 (online)	10:00 AM – 3:00 PM
Auditing Team	Barbara Pater, APP, barbara.pater@app.com.au , 0415 764 785	
Site contact	Shaun Taylor, Ramboll, staylor@ramboll.com , 0408 386 663	
Audit criteria	In accordance with Consent Conditions SSD- 6666 and the <i>Independent Audit Post Approval Requirements</i> (IAPAR 2020)	
Audit scope	Within 3 years of the previous independent audit (30-Nov-2021, 1 & 2-Dec-2021).	

Agenda – Day One

Item	Time
Opening Meeting <ul style="list-style-type: none"> ▶ Confirm scope of the audit, outline the audit process, methodology, timing, access, and resources required. ▶ Project status and update. 	10:00 AM – 10:30 AM
Site Walk <ul style="list-style-type: none"> ▶ Sight current site activities and provide focus for the review of on-site compliance with the requirements of conditions of consent and management plan requirements. ▶ Review of the implementation of mitigation measures CoC Appx 3 as applicable. 	10:30 AM – 11:30 AM
Review of Consent Conditions SSD-6666 Schedule 2:	
<ul style="list-style-type: none"> ▶ Part A – Administrative Conditions (24 conditions) 	11:30 AM – 12:00 PM

Item	Time
▶ Part B – Specific Environmental Conditions (54 conditions)	12:00 PM – 12:30 PM
Lunch break	12:30 PM – 1:00 PM
▶ Part B – Specific Environmental Conditions (54 conditions) - continued	1:00 PM – 2:45 PM
End of Day One	
▶ Status of review, summary of audit findings as applicable	2:45 PM – 3:00 PM

Agenda – Day Two

Item	Time
Review of Consent Conditions SSD-6666 Schedule 2 (continued):	
▶ Part C – Environmental Management, Reporting and Auditing (16 conditions)	10:00 AM – 11:30 AM
▶ Appendix 3 – Applicant's Management and Mitigation Measures, as applicable (21 sections)	11:30 AM – 12:45 PM
Lunch break	12:45 PM – 1:15 PM
▶ Appendix 3 – Applicant's Management and Mitigation Measures, as applicable (21 sections) – continued	1:15 PM – 2:45 PM
Closing meeting	
▶ Outcome of audit and presentation of findings. Deliverables as noted overpage.	2:45 PM – 3:00 PM

Deliverables

Audit Deliverables	Responsibility
Draft Report Submission <ul style="list-style-type: none"> ▶ 15 days following conduct of independent audit 	APP
Response to draft report <ul style="list-style-type: none"> ▶ 7 days following receipt of draft audit report from APP 	Hydro
Final report submission <ul style="list-style-type: none"> ▶ Finalised within 7 days following receipt of comments from Hydro ▶ Submitted to Hydro 	APP
Response to findings and submission of final audit report <ul style="list-style-type: none"> ▶ Final audit report submitted to DPHI in accordance with SSD-6666 Condition C14. 	Hydro
Non-Compliances (if applicable) <ul style="list-style-type: none"> ▶ Hydro is to follow the process to notify DPHI for any non-compliances identified during the audit as per SSD-6666 Conditions C8 and C9. 	Hydro

Limitations

- The audit will cover the construction requirements only and will therefore be limited to auditing the applicable conditions of Part A, B, C, and appendices in accordance with Consent Conditions SSD-6666.
- The audit will cover a sampling of records relevant to the scope. APP auditors will apply their professional judgment based on the information made available during the audit.
- APP will conduct the audit in accordance with the *Independent Auditing Post Approval Requirements* (IAPAR 2020) with the following ratings applied: Compliant, Non-Compliant and Not Triggered, with the option to raise any Opportunities for Improvement.

Request for Information
Records to be provided to the Auditor prior to the audit (current versions):
<ul style="list-style-type: none"> ▶ Remediation Works Environmental Management Plan
<ul style="list-style-type: none"> ▶ Containment Cell Management Plan

Request for Information

- ▶ Long Term Environmental Management Plan, if applicable
- ▶ Health and Safety Plan
- ▶ Water Treatment Management Plan
- ▶ Irrigation Management Plan
- ▶ Water Quality Monitoring Program
- ▶ Landscaping Management Plan
- ▶ Other relevant management plans / sub-plans (Smelter Access Plan, Air Quality, Biodiversity, etc)
- ▶ Current site map showing implementation of any environmental controls
- ▶ Details of any complaints, incidents, non-compliances as applicable
- ▶ Records for any unexpected asbestos / contamination finds as applicable

Appendix B- Audit Attendance Sheet

Appendix C – Approval of Auditors

Department of Planning, Housing and Infrastructure



NSW Planning ref: SSD-6666-PA-32

Leanne Pringle
Commercial Manager
Hydro Aluminium Kurri Kurri Pty Ltd
Wonnarua Country

19/11/2024

Sent via the Major Projects Portal only

Subject: IEA 2024 - Auditor Proposal

Dear Ms Pringle

I refer to your request for the Planning Secretary's approval of suitably qualified, experienced, and independent person/s to conduct an Independent Audit of the Hydro Remediation, submitted as required by Schedule 2, Condition C13 of SSD-6666 as modified (the consent) to NSW Department of Planning, Housing and Infrastructure (NSW Planning) on 7 November 2024.

NSW Planning has reviewed the independent auditor nominations and based on the information you have provided is satisfied that the proposed person/s are suitably qualified, experienced, and independent.

In accordance with Schedule 2, Condition C13 of the consent and the NSW Planning, *Independent Audit Post Approval Requirements* (2020), as nominee of the Planning Secretary, I endorse the following independent audit team:

- Barbara Pater – Lead Auditor
- Grant Brown – Alternative Lead Auditor

Please ensure this correspondence is appended to the Independent Audit Report.

The Independent Audit must be prepared, undertaken, and finalised in accordance with the conditions of consent and the *Independent Audit Post Approval Requirements* (2020). Failure to meet these requirements will require revision and resubmission.

Should you wish to discuss the matter further, please contact Joel Fleming, (Senior Compliance Officer) on 02 6575 3416 or email compliance@planning.nsw.gov.au

Yours sincerely



Heidi Watters
Team Leader
Compliance

As nominee of the Planning Secretary

Appendix D – Independent Audit Declarations

Declaration of Independence Form


Independent Audit Declaration Form	
Project Name:	Hydro Aluminium Kurri Kurri Pty Ltd
Consent Number:	SSD-6666 (Mod 2)
Description of Project:	Remediation of the former Hydro Kurri Kurri Aluminium Smelter site including the 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, and ongoing management of the containment cell in perpetuity.
Project Address:	Hart Rd, Loxford NSW 2327
Proponent:	Hydro Aluminium Kurri Kurri Pty Ltd
Title of Audit:	Independent Environmental Audit
Date:	29 November 2024

I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:

- i. the audit has been undertaken in accordance with relevant condition(s) of consent and the Independent Audit Post Approval Requirements (Department 2020);
- ii. the findings of the audit are reported truthfully, accurately and completely;
- iii. I have exercised due diligence and professional judgement in conducting the audit;
- iv. I have acted professionally, objectively and in an unbiased manner;
- v. I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the Independent Audit, or by relationship as spouse, partner, sibling, parent, or child;
- vi. I do not have any pecuniary interest in the project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child;
- vii. neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit; and
- viii. I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

Notes:

- a) Under section 10.6 of the *Environmental Planning and Assessment Act 1979* a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- b) The *Crimes Act 1900* contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both)

Name of the Auditor:	Barbara Pater
Signature:	
Qualification:	Lead Auditor
Company:	APP Corporation Pty Ltd
Company Address:	Level 14, 10 Spring Street, Sydney NSW 2000

Declaration of Independence Form

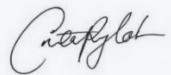
Independent Audit Declaration Form	
Project Name:	Hydro Aluminium Kurri Kurri Pty Ltd
Consent Number:	SSD-6666 (Mod 2)
Description of Project:	Remediation of the former Hydro Kurri Kurri Aluminium Smelter site including the excavation of onsite contaminated areas, excavation and treatment of Capped Waste 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, and ongoing management of the containment cell in perpetuity.
Project Address:	Hart Rd, Loxford NSW 2327
Proponent:	Hydro Aluminium Kurri Kurri Pty Ltd
Title of Audit:	Independent Environmental Audit
Date:	13 December 2024

I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:

- i. the audit has been undertaken in accordance with relevant condition(s) of consent and the Independent Audit Post Approval Requirements (Department 2020);
- ii. the findings of the audit are reported truthfully, accurately and completely;
- iii. I have exercised due diligence and professional judgement in conducting the audit;
- iv. I have acted professionally, objectively and in an unbiased manner;
- v. I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the Independent Audit, or by relationship as spouse, partner, sibling, parent, or child;
- vi. I do not have any pecuniary interest in the project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child;
- vii. neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit; and
- viii. I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

Notes:

- a) Under section 10.6 of the *Environmental Planning and Assessment Act 1979* a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- b) The *Crimes Act 1900* contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both)

Name of the Auditor:	Anita Rylah
Signature:	
Qualification:	HSEQ Systems and Auditing Business Lead and Technical Reviewer
Company:	APP Corporation Pty Ltd
Company Address:	Level 14, 10 Spring Street, Sydney NSW 2000

Appendix E – Audit Checklist

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
1	PART	A	ADMINISTRATIVE CONDITIONS			
	A		OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT			
1.1	A	A1	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the remediation works and operation of the development, and any rehabilitation required under this consent.	Based on the outcome of the audit, it is determined that the Proponent has undertaken reasonable and feasible measures are being implemented to prevent and minimise any material harm to the environment during the remediation works of the development.		Compliant
	A		TERMS OF CONSENT			
1.2	A	A2	<p>The development may only be carried out:</p> <ul style="list-style-type: none"> (b) in compliance with the conditions of this consent; (c) in accordance with all written directions of the Planning Secretary; (d) in accordance with the EIS and Response to Submissions; (e) in accordance with the RAP and CCDDR; (f) in accordance with the Development Layout in Appendix 1; (g) in accordance with the Modification Applications; and (h) in accordance with the management and mitigation measures in Appendix 3. 	<p>Based on the outcome of this audit, compliance was verified as follows:</p> <ul style="list-style-type: none"> (a) Non-compliances as identified with the conditions of consent (b) DPHI letter ref: SSD-6666-PA-30, dated 3 October 2024. Requested request for endorsement of the proposed Independent Audit team is submitted at least one month prior to the end of the current audit period (audit due for completion by 2 December 2024). (c) In accordance with the EIS and RtS (d) In accordance with the RAP and CCDDR (e) In accordance with the Development Layout Plans in Appendix 1. Detailed design drawings by GHD from 2018 (~25 drawings) + Daracon drawing ref 1640-009, Rev 01 dated 20 April 2021 for the Leachate Pond and Treatment Plant (f) In accordance with the Modification Applications 1 (TWTP) and 2 (reduction in clearing and remediation of archaeological area) (g) In accordance with the management and mitigation measures in Appendix 3 as demonstrated within the RWEMP and sub-plans. 	<p>HAKK-02-NC-01:</p> <p>Based on the non-compliances identified against conditions B19 and C6, a non-compliance is triggered against Condition A2(a).</p> <p>Close out of the non-compliances raised against conditions B19 and C6 will automatically address this non-compliance.</p>	Non-Compliant

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

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				<p>Mod-1 approved 13 September 2021 for the construction, operation and decommissioning of the temporary water treatment plant and associated infrastructure during remediation work.</p> <p>Mod-2 approved 4 March 2022 for the reduction of vegetation clearance area and remediation of area previously designated as a potential archaeological deposit.</p>		
1.3	A	A3	<p>Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:</p> <ul style="list-style-type: none"> (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and (b) the implementation of any actions or measures contained in any such document referred to in Condition A3a). 	<p>DPHI letter ref: SSD-6666-PA-30, dated 3 October 2024 in response to Compliance Report No. 4. Requested request for endorsement of the proposed Independent Audit team is submitted at least one month prior to the end of the current audit period (audit due for completion by 2 December 2024).</p> <p>Letter submitted to DPHI – given the works complete, to confirm if an IEA is required. Letter from Ramboll to DPHI sighted – dated 15 October 2024. Submitted via the planning portal as per portal receipt SSD-6666-PA-31, 'Request for IEA waiver'. Response received 15 November 2024 from DPHI advising that at this stage, the IEA is to proceed.</p> <p>The Independent Audit has been conducted 26-27 November 2024, prior to the 2 December 2024 timeframe.</p> <p>No other requests or directions received from DPHI.</p>		Compliant
1.4	A	A4	<p>The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in Condition A2(c) or A2(d). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in Condition A2(c) and A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.</p>	<p>No inconsistencies, ambiguity or conflicts to date.</p>		Not Triggered

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
	A		VOLUNTARY PLANNING AGREEMENT			
1.5	A	A5	The Applicant must enter into a planning agreement with the Minister in the terms of the offer made to the Minister by the Applicant in connection with SSD 6666 by letter dated 11 December 2020 and no later than before the commencement of the Stage 1A Works within the meaning of the planning agreement attached to the letter.	<p>The executed Voluntary Planning Agreement 5:10585026_6 BXW and VPA Letter of Offer dated 11 December 2020 was presented during the previous audit (2021) as evidenced and included Lots and VPs, Contributions for Long-Term Management of the Containment Cell, Bank Guarantees for Stages 1 & 2, and Parts 1-4.</p> <p>Certificate of payment dated 17 December 2020: Bank Guarantee JP Morgan Chase Bank, executed as per signing page.</p>		Compliant
	A		LIMITS OF CONSENT			
1.6	A	A6	<p>Lapsing</p> <p>This consent lapses five (5) years after the date from which it operates, unless the development has physically commenced on the land to which the consent applies before that date.</p>	SSD-6666 approved 13 September 2021. Works onsite have commenced prior to lapsing of approval. The Remediation Works commenced on 27 January 2021.		Compliant
1.7	A	A7	The remediation works must be undertaken over a maximum period of four years from the date of commencement of the remediation works, unless otherwise agreed with the Planning Secretary.	<p>Remediation works commenced on 27 January 2021 and are therefore required to be completed by 26 January 2025 unless otherwise agreed with the Planning Secretary.</p> <p>Remediation works completed August 2024, as notified to the Department on 12 June 2024, within the four year timeframe.</p>		Compliant
1.8	A	A8	<p>Independent Engineer's Deed</p> <p>Without limiting condition A5, the Applicant must procure the entry into a deed with an independent engineer in accordance with the offer made to the Minister as referred to in condition A5, before the commencement of the Stage 1B Works within the meaning of the planning agreement attached to the letter dated 11 December 2020 (referred to in condition A5) and in any case no later than 2 months from the commencement of the remediation works. Remediation</p>	<p>As previously evidenced: Independent Engineer's Deed between Hydro, SMEC & Minister (executed by all parties) dated 21 May 2021 was presented as evidence. The deed forms an Appendix of the VPA and includes the CQA Plan (developed by GHD).</p> <p>Remediation Works commenced 27 January 2021. Delays occurred for deed execution which resulted in works being suspended for around 2 months until the Deed was executed as per condition A8 requirements.</p>		Compliant

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
			works are to be suspended until such time as a deed is entered into if entry into the deed is not procured within the required timeframe.	Email correspondence 24 March 2021 was presented from Hydro to DPIE Director notifying status. Works for Stage 1B commenced 24 May 2021 following the execution of deed on the 21 May 2021.		
	A		NOTIFICATION OF COMMENCEMENT			
1.9	A	A9	<p>The date of each of the following phases of the development must be notified to the Department in writing, at least one month before that date, or within another timeframe agreed by the Planning Secretary:</p> <ul style="list-style-type: none"> (a) commencement of remediation works; and (b) completion of the remediation works. 	<p>(a) The initial date of Remediation Works was proposed as 18 January 2021 as per letter dated 23 December 2020 (sighted) from Hydro to DPIE; however, approval of Management Plans was not received by the Department until 25 January 2021. Portal receipt for notification of commencement; notification for commencement of remediation work 27 January 2021 amended from the 18 January 2021 as per letter from Hydro to DPHI dated 9 March 2021.</p> <p>(b) Completion of remediation work notification issued 12 June 2024, letter from Ramboll to DPHI sighted confirming completion date as 2 August 2024. The letter also advises that the Validation Report for the Containment Cell will be completed by 2 February 2025 and Site Audit Report and Site Audit Statement to be submitted by 2 August 2025. Also sighted Certificate of Practical Completion for the Engineered Containment Cell (ECC) and Site Remediation issued to Daracon, dated 1 August 2024.</p>		Compliant
1.10	A	A10	If the remediation works are to be staged, the Department must be notified in writing at least one month before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.	Remediation works are not staged. Notification has not been required.		Not Triggered
	A		SURRENDER OF EXISTING CONSENTS			
1.11	A	A11	Within 12 months of the date of commencement of development to which this consent applies, or within another timeframe agreed by	Letter dated 30 April 2022 issued from Ramboll on behalf of Hydro to DPHI as presented: "SSD 6666		Not Triggered

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
			<p>the Planning Secretary, the Applicant must surrender any existing development consents in relation to the site in accordance with the EP&A Regulation, except:</p> <ul style="list-style-type: none"> (a) DA 118/692/102; (b) DA 8/2015/399/1; and (c) DA 8/2018/46/1. 	<p>Hydro Remediation Project: Deferred Surrender of Development Consent (Condition A11)", advising that this development consent cannot be surrendered as required by this condition. Development consent issued for the processing of spent pot lining at the Smelter (8/2004/1227/11) issued by Cessnock City Council to Hydro (and not Regain, who undertook the processing) in 2005, which cannot be surrendered as Tomago Aluminium requires temporary storage of aluminium dross due to the Weston Aluminium processing facility being damaged in November 2021. Storage falls under a variation to the EPL 1548 granted 15 February 2022. The letter states: that <i>"the development consent to be surrendered by 30 June 2023. We would consult with the Department well in advance of this date if Tomago Aluminium advise that they need storage of aluminium dross to continue before this date."</i> (*timeframe was updated to end of 2025 as per below)</p> <p>Email sighted from DPHI dated 7 July 2022: "Hydro Remediation - deferred surrender of development consent for the storage of aluminium dross" requesting additional detail for:</p> <ul style="list-style-type: none"> • The date of the last shipment of dross from Tomago, quantities that are currently on site and quantities that are proposed to arrive on site from Tomago in the future. • The specific section of the SEE for DA8/2004/1227/1 that discusses the storage of aluminium wastes from Tomago/off-site. <p>Letter dated 18 July 2022 issued from Ramboll on behalf of Hydro to DPHI as presented: "SSD 6666 Hydro Remediation Project: Deferred Surrender of</p>		

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
				<p>Development Consent – Additional Information”. Confirms the following in response to DPHI’s request:</p> <ul style="list-style-type: none"> Table 1 “Response to requests for information regarding dross storage”, with the *timeframe noted to now be the end of 2025. Permissibility of dross storage section of the letter confirms consistency with, and permitted by, the development consent for the DA 8/2004/1227/11 issued by Cessnock City Council. <p>Upcoming communication with DPHI to now surrender DAs.</p>		
1.12	A	A12	<p>Upon the commencement of development to which this consent applies, and before the surrender of existing development consents required under condition A11, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents or approvals.</p> <p>Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under the former Part 4A of the EP&A Act or Part 6 of the EP&A Act as applies from 1 December 2019. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.</p>	The project has been undertaken in accordance with the Development Consent SSD 6666. No inconsistencies identified.		Compliant
	A		EVIDENCE OF CONSULTATION			
1.13	A	A13	<p>Where conditions of this consent require consultation with an identified party, the Applicant must:</p> <p>(a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and</p> <p>(b) provide details of the consultation undertaken including:</p>	Email from DPHI dated 12 December 2023 in response to Ramboll email 28 November 2023 for the Long-Term Containment Cell Management Plan. Additional email issued to DPHI 23 January 2024. Following this, DPHI requested additional information – email dated 15 October 2024 “Hydro Kurri Kurri Aluminium Smelter		Compliant

Hydro Aluminium Kurri Kurri Smelter Remediation

Independent Environmental Audit – 26-27 November 2024

ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
			(i) the outcome of that consultation, matters resolved and unresolved; and (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	<p>Remediation - Containment Cell Long Term MP - More Information Required". Refer to Condition B7 for details. Letter from Cessnock City Council dated 7 February 2024, Ref: DOC2024/011867, in response to Ramboll email 23 January 2024.</p> <p>Issued by Ramboll to EPA 28 November 2024 with follow up sent 23 January 2024. No response received.</p> <p>Correspondence with EPA for TWTP, IMP, and WQMP – EPA letter dated 20 January 2022, ref DOC22/33303-1 in response to Ramboll email to EPA received 18 January 2022.</p> <p>Consultation noted within the Landscaping Management Plan under Section 2.3.1 and Table 2-2: Housing and Property Group Comments and Hydro Response.</p>		
	A		STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS			
1.14	A	A14	<p>With the approval of the Planning Secretary, the Applicant may:</p> <p>(a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);</p> <p>(b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and</p> <p>(c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).</p>	<p>No staging of Remediation Works. As previously evidenced, the Fire and Construction Safety study was combined with existing management plans. Sighted DPIE letter dated 21 May 2021 – Approval of the Pre-Construction Hazards and Risks Studies confirming review of the Comparative Health Risk Assessment. The letter confirmed that the Planning Secretary is satisfied that a separate Fire Safety Study and Construction Safety Study are not required as per B47.</p> <p>Containment Cell Long Term Management Plan, 318000980 Containment Cell LTMP V1.1 240903.docx, Revision 1.1 dated 3 September 2024 (by Ramboll) was updated following receipt of comments from Cessnock City Council + in response to DPHI request to include</p>		Compliant

Hydro Aluminium Kurri Kurri Smelter Remediation

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ID No.	SSD Part	Req. No.	SSD-6666 Requirement (Schedule 2)	Audit Evidence	Audit Findings / Recommendations	Compliance Rating
				<p>copies of the consultation and contingency measures to be included in the Gas Monitoring program.</p> <p>Overarching RWEMP updated to reflect the modifications including Temporary Water Treatment Plant cross referenced, and Biodiversity Management Plan for the reduced vegetation area.</p>		
2	A	A15	If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.	<p>Hydro Kurri Kurri Aluminium Smelter Remediation - Containment Cell Long Term MP - More Information Required – email from DPHI dated 24 June 2024 with additional information requested as follows: provide evidence of consultation, including but not limited to any emails or other correspondence between the Applicant and consulting agencies. The gas monitoring plan needs to be updated (see comments on the gas monitoring plan regarding contingency measures).</p> <p>Containment Cell Long Term Management Plan, 318000980 Containment Cell: LTMP V1.1 240903.docx, Revision 1.1 dated 3 September 2024 (by Ramboll). Appendix 1 includes Evidence of Agency Consultation + reference within the Gas Monitoring Plan to LTMP Table 2-4 for Contingency Measures.</p> <p>LTMP resubmitted on 15 October 2024 as per Portal Receipt SSD-6666-PA-28 in accordance with Condition B7.</p>		Compliant
2.1	A	A16	If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.	<p>Current plans are in place as follows:</p> <ul style="list-style-type: none"> Containment Cell Long Term Management Plan, 318000980 Containment Cell LTMP V1.1 240903.docx, Revision 1.1 dated 3 September 2024 (Ramboll) Hydro Remediation Irrigation Management Plan, 318000737, Rev 2 dated 14 November 2022 (Ramboll) 		Compliant

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				<ul style="list-style-type: none"> Kurri Kurri Aluminium Smelter Gas Monitoring Plan, 318000980 Gas Monitoring Plan_v1.0 240422.docx, Rev 1.0 dated 22 April 2024 (Ramboll) Landscape Management Plan Kurri Kurri Smelter Decommissioning, Demolition and Remediation, 31800980, Rev 2 dated 22 April 2024 (Ramboll) The Water Treatment Plant Management Plan HAKK Temporary Water Treatment Plant (TWTP), Document Number 105079-Q-1000, Rev B2 dated 12 December 2021 (Enviro Pacific Services) was developed during the audit period, however the TWTP has now been removed. 		
	A		PROTECTION OF PUBLIC INFRASTRUCTURE			
2.2	A	A17	<p>Before the commencement of the remediation works, the Applicant must:</p> <ul style="list-style-type: none"> (a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure; (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (c) submit a copy of the dilapidation report to the Planning Secretary and the relevant council. 	<p>Commencement of Remediation Works 27 January 2021. As previously evidenced:</p> <ul style="list-style-type: none"> (a) Consultation by email with Cessnock Council on 11 February 2021. (b) Dilapidation Report – Dickson Road and Hart Road dated 1 July 2020 by DWC – Dewitt Consulting. Dickson Road (sealed), Hart Road (unsealed), both Council Roads. (c) Submission of dilapidation report from Hydro to Cessnock City Council as per email with SharePoint link, 11 February 2021. Department confirmation email dated 5 February 2021 with portal receipt lodgement of Dilapidation Report. 		Compliant
2.3	A	A18	<p>Unless the Applicant and the applicable authority agree otherwise, the Applicant must:</p>	No damage has occurred. Dilapidation survey undertaken prior to works.		Not Triggered

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			(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.			
	A		COMPLIANCE			
2.4	A	A19	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Email from Hydro to Daracon presented: SR2018-001 ECC Construction & Site Remediation, dated 18 January 2021 with final consent conditions attached. Email from Hydro to Daracon communicating: Modification 1 Temporary Water Treatment Plant SSD-6666-Mod-1. Daracon induction sighted: Hydro Aluminium Site Remediation Works – WHS & Enviro. Includes the following topics: <ul style="list-style-type: none"> • Hazards & Control Measures Relevant to Site • Storage & Handling of Hazardous Chemicals & Dangerous Goods • Emergency Response Management • Incident Management & Reporting • Reporting all Environmental Incidents • Vehicle Site Access Requirements • Site Requirements – Vehicles • Mandatory PPE • Remedial Works Environmental Management Plan (RWEMP) • Project Environmental Aspects, Constraints & Key Risks • Environmental Considerations • Soil & Water Management (Erosion & Sediment Control) • Biodiversity Management – Flora and Fauna 		Compliant

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				<ul style="list-style-type: none"> Air Quality Management (Dust & Odour) Waste & Resource Recovery Management Summary of Environmental Requirements A Key Risk on this Project is Adverse Community Impacts <p>Following induction, personnel would need to take a quiz – HAKK Site Induction Quiz (Form No. IM-FOR-0203-001, Rev 02), e.g., Q12 – <i>What must you do if you find what appears to be an Aboriginal or Cultural artefact?</i></p> <p>Inductions were recorded on the Induction and Training Register e.g., No. 295 employee from Enviro Pacific inducted 14 February 2022 + No 511 from Enviro Pacific inducted 6 March 2023 with Asbestos Removal and Asbestos Awareness Training noted. Last inductee noted as No. 740 from Civil Movement inducted on 18 July 2024.</p> <p>Additionally there was a Visitors Induction (IM-CHK-0203-002, Rev 05) and Delivery Driver's Induction (IM-FOR-0203-015, Rev 03). Daracon left site August 2024.</p>		
	A		OPERATION OF PLANT AND EQUIPMENT			
2.5	A	A20	<p>All plant and equipment used on site, or to monitor the performance of the development, must be:</p> <ul style="list-style-type: none"> (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner. 	<p>At the time of the audit, no Daracon hired plant or equipment was present on site, however records were presented as follows:</p> <p>Maintenance History Report as dated 31 October 2023 for 3842 Komatsu HM400 Truck sighted. Daracon Pre-Delivery Plant Inspection – For Hired Plant form also presented. Dated 16 March 2023. Notes conformance with checklist including quacker reverse alarm. Signed by Daracon plant mechanic.</p> <p>Due to the site conditions, a clearance certificate was issued for decontamination of the plant: Letter from Prensa dated 13 November 2023 "Asbestos Clearance</p>	<p>Note: it is noted that the sampled plant inspection form was signed by the plant mechanic but the signature box for confirmation by Daracon Group Personnel was left blank. Refer to HAKK-02-OFI-03 which is an improvement opportunity to action a lessons learnt on the outcome of the works</p>	Compliant

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				<p>Certificate – Visual Clearance of Decontaminated Machinery used within Hydro Aluminium Kurri Kurri, Hard Road, Loxford NSW 2327". Details of plant noted as 3842 Komatsu HM400 Truck, 3842 Komatsu HM400 Truck, inspected 13 November 2023. Letter confirms: Prensa hereby deems that the machine being removed from the asbestos work area has been decontaminated to a satisfactory standard.</p> <p>Maintenance checks were also carried out on the TWTP daily. Sighted: HAKK Daily Log for March and April 2023 with the following table headings:</p> <ul style="list-style-type: none"> • Date: Friday, 24 March 2023 • Time: 10:15am • TW Tanks: OK • TW Valves: Fill 13 • TW Discharge: Empty 56 • Pond clarity: Clearing • RAW Pump: OK • Pump Pump: OK • Geobag Bund 1: Empty • Geobag Bund 2: Dirty • Geobag 1: 0% • Geobag 2: 80% • Re-Circ Pump: OK • Re-Circ Pump (PSI): 42 • Acid Dose: OK • Raw pH: 8.82 • Re-Circ pH: 8.66 • Raw Flow L/M: 290 • Clar Pump: OK • Clarifier Pump (PSI): 19 • Clarifier Flow (L/M): 199 • CaCL Dose (L/Hr): 21.6 	(recorded under Condition B17).	

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				<ul style="list-style-type: none"> ACH Dose (L/Hr): 0.305 Poly Dose (L/Hr): 9.53 Clar Slow Mix: OK Clar Scraper: OK 		
	A		UTILITIES AND SERVICES			
2.6	A	A21	Before the construction of any utility works associated with the development, the Applicant must obtain relevant approvals from service providers.	Remediation works commenced on 27 January 2021. No utility works are to be constructed as part of the remediation works.		Not Triggered
	A		APPLICABILITY OF GUIDELINES			
2.7	A	A22	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.	As referenced within management plans Remediation Works Environmental Management Plan Hydro Kurri Kurri EMP_FINAL_REV 1_2021_01_25.docx, Table 2-4: Key Legislation, Regulation and Planning Instruments. Includes columns for “Action, Regulation or Instrument” and “Applicability to Hydro”.		Compliant
2.8	A	A23	However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	No directions in respect to ongoing monitoring and management obligations issued to date		Not Triggered
	A		ADVISORY NOTES			
2.9	A	A24	All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.	The Project is subject to the following: <ul style="list-style-type: none"> Development Consent SSD-6666 (including modifications) EPL 1548 Chemical Control Order Environmentally Hazardous Chemicals (EHC) Licence No. 5 specific to the storage of the Aluminium 		Compliant

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				<p>Smelter waste. Primarily associated with spent pot lining within the sheds + capped waste stockpile. 10% gypsum for processing to become approved to be placed under landfill. In place up to 1 September 2023.</p> <p>Original email from Ramboll to the EPA on 20 October 2023 “Hydro Aluminium Kurri Kurri: EHC Licence and EPL Surrender” to request confirmation that the EHC Licence is no longer required. EPA responded 9 November 2023 to arrange a meeting to better understand the current site situation and future management. Meeting occurred 16 November 2023.</p> <p>Following the meeting, a letter was issued dated 5 December 2023 from Ramboll on behalf of Hydro to the EPA: “Hydro Aluminium Kurri Kurri EHC Licence: Review of Licensing Requirement” to request agreement that the renewal of the Chemical Control Order Licence. Submitted by email, also dated 5 December 2023, from Ramboll to the EPA. Follow up email sent from Ramboll to EPA on 14 May 2024. No further response has been received.</p>		
3	PART	B	SPECIFIC ENVIRONMENTAL CONDITIONS			
	B		REMEDIATION			
3.1	B	B1	<p>Site Auditor</p> <p>Prior to the commencement of remediation works, the Applicant must provide evidence to the Planning Secretary that a Site Auditor has been appointed to independently review and endorse the implementation and validation of the remediation works. The scope of the Site Auditor’s role is to include consideration of the suitability of the Long-Term Environmental Management Plan (LTEMP) to manage the containment cell in perpetuity (see Conditions B7 and B11).</p>	<p>Remediation Works commenced 27 January 2021.</p> <p>Previously evidenced letter dated 23 December 2020 from Hydro to DPHI notifying appointment of Site Auditor (AECOM).</p> <p>Site Auditor is unchanged and remains engaged until the end of the project.</p>		Compliant

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3.2	B	B2	Remediation Works The Applicant must remediate the site, including construction of a containment cell, in accordance with the design specifications, criteria and requirements detailed in the Remedial Action Plan (RAP), the Containment Cell Detailed Design Report (CCDDR) and relevant guidelines produced or approved under the CLM Act to the satisfaction of the Site Auditor.	Construction of Containment Cell is now complete and constructed as designed. Concept design did not change; clarifications for minor changes only. SMEC Report upcoming (draft by the end of November 2024). Completed 1 August 2024 as per completion certificate granted to Daracon. Validation Report currently under draft and being prepared for the upcoming February 2025 timeframe.		Compliant
3.3	B	B3	Remediation works must be undertaken by a suitably qualified and experienced contractor(s).	The remediation works were undertaken by Daracon. Daracon's experience with remediation as per: https://daracon.com.au/services/siteremediation		Compliant
3.4	B	B4	Validation Consultant(s) Prior to the commencement of remediation works, the Applicant must provide evidence to the Planning Secretary, that a suitably qualified and experienced Validation Consultant(s) has been appointed to document and validate the remediation works to demonstrate compliance with the RAP.	Remediation Works commenced 27 January 2021. Letter from Hydro to the Department dated 23 December 2020 notifying appointment of Validation Consultant, Ramboll Australia Pty Ltd was presented as evidence of compliance during the previous audit. Ramboll continues to be engaged.		Compliant
3.5	B	B5	Containment Cell Management Plan Prior to the commencement of remediation works, the Applicant must prepare a Containment Cell Management Plan (CCMP) detailing the containment cell construction, filling and capping activities to the satisfaction of the Planning Secretary. The CCMP must form part of the RWEMP required by Condition C2 and be prepared in accordance with Condition C1. The CCMP must: <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person(s); (b) be prepared in consultation with the EPA and Environmental Services Group of Housing and Property Group of the Department (H&P Group); (c) describe the design of the containment cell and its construction methodology, including evidence that engineering drawings have been prepared by appropriately qualified structural or civil engineers; (d) include details of the quality control and quality assurance procedures, program and performance specifications for the construction of the containment cell; 	A Containment Cell Management Plan (CCMP) ref 318000533 Rev 0, 23 December 2020 was developed by Ramboll Australia Pty Ltd and forms part of the RWEMP as Appendix A as evidenced during the previous audit and actioned prior to commencement of remediation works. The approval letter from the Department dated 25 January 2021 was presented as evidence during the previous audit, approving the RWEMP and plans including "Hydro Remediation Project Containment Cell Management Plan, prepared by Ramboll, Final Revision 0, dated 23/12/2020" (i) CCMP Appendix 9 – CCMP Preparation Team Details includes a table of personnel and their role in the preparation of the CCMP, qualifications / years of experience, and relevant environmental and construction management experience.		Compliant

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			<p>(e) describe the measures to be implemented to ensure adequate control of environmental impacts associated with the containment cell construction activities;</p> <p>(f) include details of a proposed construction program, including a mechanism for informing relevant agencies of the progress of construction of the containment cell; and</p> <p>(g) be prepared in accordance with the RAP and the CCDDR.</p>	<p>(ii) CCMP Section 4 EPA and H&P Group Consultation confirms consultation with the EPA and H&P was undertaken in October 2020. Evidence presented as per EPA letter dated 16 October 2020, ref DOC20/851549-1, SF18/107454 and email 8 September 2020 from DPIE with consultation with the H&P Group. No comments were made on the CCMP.</p> <p>(iii) CCMP Appendix 1 – Detailed Design Drawings by GHD Pty Ltd; Appendix 2 – Constructability Assessment (GHD 2018), and Appendix 3 – Technical Specification</p> <p>(iv) CCMP Section 3 Implementation, 5 Construction Quality Assurance, 6 Contractor's Construction Quality Control, 7 Remediation Validation, Appendix 4 – Containment Cell Design: Construction Quality Assurance (CQA) Plan prepared by GHD, and Appendix 5 – Remediation Contractor, Daracon's Integrated Project Management Plan (IPMP).</p> <p>(v) CCMP Section 8 Containment Cell Construction Environmental Management and Appendix 7 – Containment Cell Construction Environmental Management Measures (Extracts from the RWEMP)</p> <p>(vi) A construction program is noted as Appendix 8, the Construction Program itself was not included within the CCMP, however it was presented separately as Daracon's Construction Program Programme and Project Schedule – HAKK Site Remediation Updated Schedule/Program, dated 7 September 2021.</p> <p>(vii) CCMP Section 7 Remediation Validation and Appendix 6 – Containment Cell Sampling and Quality Plan</p> <p>The Containment Cell Long Term Management Plan has now been developed as per Conditions B7-B9.</p>		

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3.6	B	B6	<p>The Applicant must:</p> <ul style="list-style-type: none"> (a) not commence remediation works until the CCMP required by condition B5 is approved by the Planning Secretary; and (b) implement the most recent version of the CCMP approved by the Planning Secretary. 	<ul style="list-style-type: none"> (a) As evidenced during the previous audit, letter from DPHI (previously DPIE) dated 25 January 2021 as evidence of compliance, approving the RWEMP and plans including “Hydro Remediation Project Containment Cell Management Plan, prepared by Ramboll, Final Revision 0, dated 23/12/2020”. Remediation works commenced 27 January 2021. (b) Containment Cell inspection testing was undertaken by Daracon as per ITPs. Sighted 1640-ITP-HKK-005/C1-1 for culvert signed 24 June 2021. Also sighted IM-FOR-1411-002 Rev 1 dated 9 September 2022 Hold Point Notification and released and signed by Hydro. 002 Rev 04 dated 28 March 2022 for soil confining layer. ITP for Waste Placement 1640-ITP-HKK-017_WP-22 dated 17 August 2023 – signed by Hydro 22 August 2024. 		Compliant
3.7	B	B7	<p>Long-Term Environmental Management Plan</p> <p>Two months prior to the completion of filling of the containment cell, the Applicant must prepare a LTEMP for the containment cell, to the satisfaction of the Site Auditor and the Planning Secretary. The LTEMP must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person(s) whose appointment has been agreed to by the Planning Secretary; (b) be prepared in consultation with Council, the EPA and Director, Environmental Services Group of H&P Group or its successors; (c) include, but not be limited to: <ul style="list-style-type: none"> (i) identification of all relevant statutory and other obligations, including all approvals, licences, agreements and financial arrangements; (ii) details of ongoing management roles and responsibilities; (iii) details of all monitoring, inspections, environmental controls, requirements and measures to manage the ongoing integrity and performance of the containment cell; 	<p>The draft LTMP for Containment Cell was initially issued to DPHI on 23 January 2024. No response was received at the time and the decision was made to formally submit via the Project Portal on 23 April 2024. Following this, DPHI requested additional information – email dated 15 October 2024 “Hydro Kurri Kurri Aluminium Smelter Remediation - Containment Cell Long Term MP - More Information Required”. Request included:</p> <ol style="list-style-type: none"> 1. provide evidence of consultation, including but not limited to any emails or other correspondence between the Applicant and consulting agencies. Addressed under Appendix 1 2. gas monitoring plan needs to be updated (see comments on the gas monitoring plan regarding contingency measures). Section 2.6 of the GMP refers to Table 4-2 of the LTMP to address the contingency measures. 	<p>HAKK-02 OFI-01:</p> <p>Ramboll is engaged as the Validation Consultant and has developed the Long-Term Environmental Management Plan as approved by the Department, as well as the Containment Cell Management Plan during the construction phase. Ramboll also develops the annual compliance reports which the Department provides acceptance letters in response to the submissions.</p> <p>Approval of Ramboll's position has not been formally received from the Department. However, based upon Ramboll's</p>	Compliant

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			<p>(iv) details of the contingency measures and responses to be implemented for any identified issues with the containment cell; and</p> <p>(v) mechanisms for performance reporting and auditing in line with the relevant legislation and guidelines;</p> <p>(d) incorporate a programme for ongoing review of the LTEMP to ensure it remains contemporary with relevant environmental standards.</p>	<p>Containment Cell Long Term Management Plan, 318000980 Containment Cell LTMP V1.1 240903.docx, Revision 1.1 dated 3 September 2024 (Ramboll)</p> <p>(a) Prepared by Ramboll (b) Consultation evidenced as follows:</p> <p>EPA: Request for comment on draft LTMP issued 28 November 2023 (and follow up 23 January 2024). No response received.</p> <p>Property and Development NSW: Request for comment on Draft LTMP issued 28 November 2023. A response was received 12 December 2023 advising no changes were required.</p> <p>Cessnock City Council: Request for comment on draft LTMP issued 23 January 2024. A response was received 7 February 2024, with comments addressed in the revised draft LTMP. Section 1.5 – Table 1-1 captures all the feedback and commentary / where addressed. Appendix 5 includes the leachate monitoring.</p> <p>(c) LTMP includes the following:</p> <ul style="list-style-type: none"> Section 2.1 Approvals and Licences; Appendix 2 – Applicable Approvals and Licences Section 3 Management roles and responsibilities. Section 4 Inspections and monitoring; Appendix 3 Containment Cell Risk Register Table 4-2: Containment Cell Contingency Response Section 5 Performance reporting and auditing <p>(d) Section 5.3 LTMP Review and Improvement. Review frequency noted as:</p>	<p>continued engagement across the entire project period, it of the auditor's opinion that they are suitably qualified and experienced in accordance with Condition B7(a).</p> <p>It is recommended, that clarification be sought from the Department to confirm Ramboll's role as Validation Consultant, prior to the finalisation of the Remediation Validation Report as per Condition B10 which states that:</p> <p><i>"the Applicant must submit a Remediation Validation Report (RVR) to the Planning Secretary. The RVR must:</i></p> <p>(a) <i>be prepared by the appointed Validation Consultant (s) (see Condition B4) to the satisfaction of the Site Auditor."</i></p> <p>Following the audit, clarification was sought from the Department to confirm Ramboll's position as Validation Consultant (as linked to condition B4). The Department responded 19 December 2024 as follows:</p> <p><i>"In regards to condition B4, the approval of the Planning Secretary for the Validation</i></p>	

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				<ul style="list-style-type: none"> Biannually for the first ten years following completion of the Containment Cell Following a non-compliance with the LTMP. 	<p><i>Consultant is not required. I note that the letter from Hydro to the Planning Secretary providing details of the Validation Consultant is dated 23 December 2020, which is prior to the commencement of remediation works. Therefore, the requirements of condition B4 have been met."</i></p> <p>This finding is therefore considered appropriately addressed and its status closed.</p>	
3.8	B	B8	As part of the LTEMP required under Condition B7, the Applicant must include the following: <ul style="list-style-type: none"> (a) Landscaping Management Plan (see Condition B46); and (b) Gas Monitoring Plan (see Condition B35). 	LTMP was verified to include: <ul style="list-style-type: none"> (a) Appendix 4 Landscaping Plan (b) Appendix 6 Gas Monitoring Plan 		Compliant
3.9	B	B9	Upon completion of the construction, filling and capping of the containment cell, the Applicant or any succeeding landowner(s) whose landholding includes the containment cell, must: <ul style="list-style-type: none"> (c) implement the approved LTEMP; and (d) manage the containment cell in perpetuity in accordance with the LTEMP as required by Condition B7. 	Containment Cell Revegetation Management Report No. 2 – October 2024 presented as evidence. Includes status of planting and photos e.g., individual tube stock planting. <p>Sump monitoring undertaken on 15 August 2024 – WO ES2426804 Certificate of Analysis by NATA accredited lab ALS. 15.3 fluoride. No evidence of any leak in the leak detection sumps 01 and 02. Additional testing actioned:</p> <ul style="list-style-type: none"> 18 September 2024 – WO ES2430547, order No. 318001335. 14 October 2024 – WO ES2433622, order No. for EC Monitoring. 	<p>HAKK-02 OFI-02: As part of the long-term management of the Containment Cell, regular inspections are being actioned, however the completed inspection form sampled did not include wording specific to the long term requirements e.g., inspection of fauna fencing. It is acknowledged that annual inspections of the fauna fencing are only required on an annual basis.</p>	Compliant

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				<ul style="list-style-type: none"> 7 November 2024 Targeted Inspection – Element No. 17 Environment at ECC. <p>EPA notification received 24 August 2024 (Saturday) to advise that there had been an earthquake occurred in the vicinity of Denman in the Upper Hunter of NSW on 23 August 2024 at 12:08pm. 12.7 magnitude earth tremor recorded 90kms from site – inspection was actioned on the containment cell – no movements noted, slippage or slumping, all appeared normal, ponds and dams no damage or leakage. Checklist sighted with comments:</p> <ul style="list-style-type: none"> No. 15 – Checked gas vent. No movement and still vertical. No. 16 – Checked all four sides & corners of batter. No slippage or slumping. No. 17 – Checked liquid levels in all 6 sumps No. 18 – Checked west surge pond and east surge pond. All ok, no damage or leakage. No. 19 – Two north dams & CWS footprint. All ok, no damage or leakage. Required action: Checked sump levels on Thu 29/8/2024 and all appear to be normal. <p>Annual inspections to manage Containment Cell as per LTMP are not yet triggered.</p>	However, it is recommended to include more commentary during inspections to demonstrate these areas are being regularly checked in accordance with the LTMP.	
3.10	B	B10	Remediation Validation Report Within six months of completion and capping of the containment cell, or as otherwise agreed by the Planning Secretary, the Applicant must submit a Remediation Validation Report (RVR) to the Planning Secretary. The RVR must: <ul style="list-style-type: none"> (a) be prepared by the appointed Validation Consultant(s) (see Condition B4) to the satisfaction of the Site Auditor; (b) be prepared in accordance with the relevant guidelines produced or approved under the CLM Act; (c) describe the remediation works, the validation carried out and the final condition of the site; 	Remediation Validation Report is currently being drafted. Timing of this condition is not yet triggered. Completion of containment cell was August 2024; this will be triggered February 2025.		Not Triggered

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			<p>(d) validate the remediation works against the remediation criteria set out in the RAP. Where the RVR states the remediation criteria have not been achieved and additional remediation work is required, the Applicant must promptly undertake the additional work and provide the Planning Secretary with evidence it has been completed and the remediation criteria have been achieved to the Validation Consultant's satisfaction;</p> <p>(e) assess the results of any post-remediation testing against the remediation criteria set out in the RAP; and</p> <p>(f) include, but not be limited to, a:</p> <ul style="list-style-type: none"> (i) Construction Quality Assurance report or equivalent; (ii) design report; and (iii) waste classification report in accordance with EPA Waste Classification Guidelines. 			
3.11	B	B11	<p>Site Audit Report and Site Audit Statement</p> <p>Within six months of submission of the RVR required by Condition B10 or as otherwise agreed by the Planning Secretary, the Site Auditor must submit a Site Audit Report (SAR) and Site Audit Statement (SAS) to the Planning Secretary. The SAS and SAR must be prepared in accordance with the relevant guidelines produced or approved under the CLM Act and must confirm:</p> <ul style="list-style-type: none"> (a) the remediation works have been completed in accordance with the RAP; (b) the risks to human health and the environment have been addressed in accordance with the objectives in the RAP; (c) the suitability of the site for the intended future uses; and (d) the suitability of the LTEMP required by condition B7 to manage the Containment Cell in perpetuity. 	Timing of this condition is not yet triggered. Following submission of the Remediation Validation Report in February 2025, the Site Audit Reports and Site Audit Statements will be actioned within the 6-month timeframe (expected to be no later than August 2025).		Not Triggered
3.12	B	B12	<p>Despite condition B11 above, with the agreement of the Planning Secretary, the Site Auditor may, before the completion of the whole of the remediation works, submit a SAS and SAR for a part of the Site (other than that part on which the Containment Cell is located) if the remediation works have been completed in accordance with the RAP for that part of the Site. The SAS and SAR must be prepared in accordance with the relevant guidelines produced or approved under the CLM Act and must confirm:</p>	<p>The project will have in place several site audit statements as follows:</p> <ul style="list-style-type: none"> • Containment Cell – SAS A2 accompanied with the LTMP • Parcel 16 – SAS A1 • Parcel 15 – SAS A1 + remaining lots to be signed, with multiple statements under one SAR for different land uses. 		Not Triggered

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			<p>(a) the remediation works for the relevant part of the Site have been completed in accordance with the RAP;</p> <p>(b) the risks to human health and the environment relating to the relevant part of the Site have been addressed in accordance with the objectives in the RAP; and</p> <p>(c) the suitability of the relevant part of the land for the intended future uses.</p> <p>If Site Audit Reports and Site Audit Statements are submitted progressively as the remediation works on parts of the Site are completed, the final SAS and SAR are not required to cover those parts of the Site for which Site Audit Statements and Site Audit Reports have already been submitted. However, the final SAS and SAR must otherwise comply with condition B11.</p>	<ul style="list-style-type: none"> Leachate plume 2 years of post-completion monitoring – will follow after monitoring period. SAS will then be issued. <p>Timing of the Site Audit Statement and Site Audit Report is expected August 2025 and therefore not yet triggered during this audit.</p>		
	B		WORK HEALTH AND SAFETY			
3.13	B	B13	The Applicant must ensure that all remediation works are carried out in accordance with <i>NSW Work Health and Safety Regulation 2017</i> (WHS Regulation) and relevant guidelines.	<p>WHS Management Plan (WHS Plan) – Smelter Demolition and Site Remediation, Rev 12, 6 November 2020, effective from 23 December 2020.</p> <p>Hydro Aluminium Site Remediation Works – WHS & Enviro as sighted under Condition A19 encompasses both Safety requirements and Environmental.</p>		Compliant
3.14	B	B14	<p>Prior to the commencement of remediation works, the Applicant must prepare a Health and Safety Plan (HSP) for the remediation works to the satisfaction of the Planning Secretary. The HSP must form part of the RWEMP required by Condition C2 and be prepared in accordance with Condition C1. The HSP must:</p> <p>(a) describe the controls to ensure compliance with the WHS Regulation including controls to be implemented to manage the risks associated with workers coming into contact with asbestos, contaminated groundwater and/or leachate;</p> <p>(b) identify personal protective equipment (PPE) required for use onsite;</p> <p>(c) describe the procedures for training, education and awareness programs and inductions for site personnel to ensure adequate protection from human health risks, including asbestos;</p>	<p>Work Health & Safety Management Plan (WHS Plan) – Smelter Demolition and Site Remediation, Rev 12, 6 November 2020, effective from 23 December 2020 is unchanged since the previous audit.</p> <p>The WHS Plan is Appendix L of the RWEMP and approved as part of the RWEMP by DPHI (formerly DPIE) as per approval letter 25 January 2021.</p> <p>The WHS Plan includes the following:</p> <p>(a) Controls are described to ensure compliance with the WHS Regulation e.g. Section 9 Site Safety Procedures and Appendix 1 – Asbestos Removal Procedure, describe procedures for the removal, handling and transportation of asbestos containing and other contaminated</p>		Compliant

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			<p>(d) describe the location of the real time ambient air monitors for ammonia and hydrogen cyanide gases including the trigger for the implementation of additional controls;</p> <p>(e) identify requirements for health monitoring for site personnel and documentation procedures; and</p> <p>(f) details of exclusion zones and decontamination procedures.</p>	<p>material, and the management of groundwater and leachate.</p> <p>(b) Section 9.7 identifies the required PPE. Specific PPE for Asbestos removal is included under Appendix 1 – Section 6.11 PPE and RPE Requirements that the Containment Cell Construction and Site Remediation Principal Contractor personnel are required to wear when working within the Capped Waste Stockpile.</p> <p>(c) Section 7 Induction and Training. Appendix 1 – Section 5.6 and 5.7 describes the licensing and training requirements for asbestos removal work and that Asbestos Awareness Training shall be provided to all non-removal workers within the removal zones.</p> <p>(d) Section 6.3 of Appendix 1 details the process involved for air monitoring with monitors placed at strategic locations by the hygienist/asbestos assessor prior to the commencement of asbestos work. The procedure describes the need for air monitoring e.g. mandatory for all friable asbestos removal. The procedure also states that a third-party NATA Accredited occupational hygienist will be engaged to undertake asbestos air monitoring, including Ammonia, LEL, Hydrogen, Carbon Monoxide, Oxygen, PAHs, VOCs, Respirable and Crystalline Silica, with a minimum of 4 monitors used at each area. An Occupational Health and Hygiene Management Plan (OHHMP) will be developed to detail the monitoring procedures, controls, and trigger limits.</p> <p>(e) Appendix 1 – Asbestos Management Procedure includes Section 5.5 Health Monitoring in which pre-employment medicals are provided to Enviropacific workers prior to commencing licensed asbestos removal work and a risk assessment is undertaken prior to commencement of works. The procedures also states that health monitoring occurs regularly and at least once every 2 years. Reports are</p>		

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				<p>maintained for at least 40 years and retained at HO.</p> <p>(f) Section 6.2 Site Access, Boundaries, Signs and Barricades of Appendix 1 confirms that the primary asbestos removal areas will be the areas where asbestos impacted material is being excavated/removed and loaded (i.e. capped waste stockpile, stored asbestos area, Dickon Rd north storage area) and the containment cell where it is being placed. These areas will be fully fenced with asbestos removal signage erected. Designated haulage routes will be defined between the removal areas and the cell. These haulage routes will be barricaded, and light vehicle crossover points will be placed at specific locations (limited to the minimum number necessary). Section 7 details the Decontamination procedure for personnel, equipment, plant, PPE and the asbestos work area.</p>		
3.15	B	B15	<p>The Applicant must:</p> <p>(a) not commence remediation works until the HSP required by Condition B14 is approved by the Planning Secretary; and</p> <p>(b) implement the most recent version of the HSP approved by the Planning Secretary.</p>	<p>(a) Work Health & Safety Management Plan (WHS Plan) – Smelter Demolition and Site Remediation, Rev 12 6 November 2020, effective from 23 December 2020. The WHS Plan is Appendix L of the RWEMP which was approved by DPHI as per approval letter dated 25 January 2021.</p> <p>(b) WHS Plan is unchanged. SafeWork NSW Notice of Intent to Remove Friable Asbestos – 943R-00378099-03 dated 2 May 2023 exp 12 February 2028, asbestos removal No. 211326 Enviro Pacific Class A/ASA/Class B/ASB. Enviro Pacific specific OHS Plan for asbestos sighted (engaged by Daracon) – ref 511810-OHHMP-R2 dated 3 September 2021. Prensa Asbestos Clearance Certificate – Visual Clearance of Decontaminated Machinery used within Hydro Aluminium dated 15 May 2023. Asbestos Removal Control Plan dated 28 July 2023 by Enviro Pacific.</p>		Compliant

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				<p>Daracon 12 July 2024 – includes Safety Aspect – plant and vehicles, excavation, services, first aid, fire protection, public / site access, formwork, work enviro, hand tools, lifting, confined spaces, hot works, PPE, chemicals, heights, office / amenities, emergency.</p> <p>Conditions / Behaviours Observed on 26 February 2024 – safe behaviours noted with photos to support training and competency compliance.</p> <p>Daracon Safety Observation Form No 73843 dated 16 March 2023 – actioned to place delineation on ramp dated 16 March 2023 – reversing issues only occur at early morning when sun is still coming up.</p>		
	B		SOILS, WATER QUALITY AND HYDROLOGY			
3.16	B	B16	<p>Imported Material for Containment Cell Construction</p> <p>The Applicant must:</p> <ul style="list-style-type: none"> (a) ensure that only VENM, ENM, or other material approved in writing by EPA or site auditor is brought onto the site; (b) keep accurate records of the volume and type of fill to be used; and (c) make these records available to the Planning Secretary upon request. 	<p>Only VENM material (sourced from approved quarries) were imported for use in the construction of the Containment Cell.</p> <p>Sighted quarry as VENM – Rosebrook Quarry for graded aggregate with a particle size of 20-50mm – imported 50/20 rock stockpile.</p> <p>Boral Seaham Quarry for graded sand less than 5mm – import sand stockpile.</p> <p>No other material requiring classification under the <i>Waste Classification Guidelines</i>, or requires EPA or Auditor approval to be used, have been imported to the site.</p> <p>Construction of the Containment Cell is now complete.</p>		Compliant
3.17	B	B17	<p>Erosion and Sediment Control</p> <p>Prior to the commencement of any remediation works or surface disturbance the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) guideline</p>	<p>The Erosion and Sediment Control Plan (ESCP) included as part of the RWEMP as approved by the DPHI on 25 January 2021.</p> <p>Daracon Environmental inspection sighted for the 3 August 2023 following 9mm rainfall from the previous day. Inspection includes erosion and sediment controls</p>	HAKK-02_OFI-03: Some of the Daracon inspections noted items as inspected but not compliant with entries unmarked and inconsistent at times.	Compliant

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			and the Erosion and Sediment Control Plan included in the RWEMP required by condition C2.	<p>(fencing, drains, silt traps, clean roads, stockpiles and dust), sediment ponds (water sampled, intentional discharge, unintentional discharge, sediment removed) – not applicable, waste management (tidy site, waste disposal, truck wheel cleaning, wheel wash bays still clear, concrete washout bay); other environmental controls placed and effective (water cart use, neighbourhood, fauna / flora, heritage, noise & vibration, chemicals, bunding, fuel / servicing).</p> <p>Daracon Environmental inspection sighted, dated 6 October 2023, post rainfall on 5 October 2023 ~11mm. Daracon Environmental inspection also sighted for the 18 October 2023. Notes water cart in use, dams have capacity.</p> <p>Daracon Environmental inspection on 12 February 2024 following 41mm rain received in the previous week. Notes that the site recovered very well considering the rainfall received.</p> <p>Email from Daracon: “Enviro Inspection following Boxing Day Storms” dated 29 December 2023 to Hydro with photos attached of completed maintenance including reinstatement of sediment fencing and general tidy up at Containment Cell area in response to Hydro’s email from 27 December 2023 with attached photos of required areas. Hydro Enviro inspection dated 27 December 2023 also sighted, includes fencing for repair and silt build up.</p> <p>Sediment fencing in place until revegetation stabilised at Containment Cell. Refer to photos.</p>	Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.	
3.18	B	B18	Stormwater Management System <p>Prior to the placement of contaminated waste materials in the containment cell, the Applicant must install and operate a stormwater management system for the development. The system must:</p> <ul style="list-style-type: none"> (a) be generally in accordance with the design in the CCDDR; (b) be in accordance with applicable Australian Standards; 	The sediment basins and swales required to manage stormwater during the placement of contaminated waste materials in the Containment Cell were constructed in accordance with Figure 3 in Appendix 1 of the development consent – these were temporary and have now been removed with the area revegetated as sighted during the audit site inspection.		Compliant

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			<p>(c) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines;</p> <p>(d) divert existing clean surface water around operational areas of the site;</p> <p>(e) direct all sediment laden water in overland flow away from the leachate management system; and</p> <p>(f) prevent cross-contamination of clean and sediment or leachate laden water.</p>	<p>As evidenced during previous audit: Containment Cell Management Plan (CCMP) Rev 0, ref 318000533 dated 23 December 2020 includes detailed design of the containment cell stormwater areas as Appendix 1:</p> <ul style="list-style-type: none"> Drawing No. 22-18015-C023 GENERAL ARRANGEMENT – STORMWATER Drawing No. 22-18015-C111 STORMWATER DETAILS – SHEET 1 OF 2 Drawing No. 22-18015-C112 STORMWATER DETAILS – SHEET 2 OF 2. <p>GHD SR2018-001 Technical Specification – Containment Cell Design, 22/18015 dated 18 November 2018 included as Appendix 3.</p> <p>Detailed Design Report (GHD, 2018) estimated approximately 12,720kL of leachate will be generated and require treatment with leachate management designs e.g. leachate buffer storage dam which is sized to contain one-month peak generation volume as per Drawing No. 22-18015-C024.</p> <p>Leachate Management Plan (LMP) Rev 0 ref 318000533, 23 December 2020 includes procedures for leachate management during remediation of the Capped Waste Stockpile and other contaminated areas, and the placement of material into the Containment Cell and is part of the DPIE approved Soil and Water Management Plan (SWMP) Rev 0, ref 318000533 dated 23 December 2020.</p>		
3.19	B	B19	Within two months of completion of installation of the stormwater management system or within another timeframe agreed by the Planning Secretary, works-as-executed drawings signed by a registered surveyor must be submitted to the Site Auditor demonstrating that the stormwater drainage and finished ground levels have been constructed as detailed in the CCDDR.	<p>Surveys of the main stormwater infrastructure:</p> <ul style="list-style-type: none"> Culvert 01 settlement survey – Original Survey 28/05/2020; Recheck Survey 03/06/2021, 1640-012, Rev 01. Conformance survey for Sed Basin 1, 26/06/2021, Rev 01 Conformance survey for Sed Basin 2, 24/04/2021, Rev 01 	HAKK-02-NC-03: Based on the evidence presented during the audit, it was unable to be verified that the Work-As-Executed drawings were submitted to the Site Auditor within 2 months of the completion of the stormwater management system	Non-Compliant

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				Stormwater infrastructure was signed off by the Independent Engineer (SMEC Pty Ltd) as per Certificate of Compliance for Stage 1B Works. However, it was not formally submitted to the Site Auditor within the two-month timeframe. It is noted that the Site Auditor made numerous site visits and was shown this infrastructure as well as the cell perimeter drains and the five other culverts as part of those site visits. This includes during construction and later during operation.	installation, as required by Condition B19. Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.	
3.20	B	B19A	Water Treatment Plant Management Plan 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: <ul style="list-style-type: none"> (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: <ul style="list-style-type: none"> (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 (iii) the North Dam (c) a TWTP operational stage monitoring program that ensures each treated effluent batch meets all 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 all the 'Treated Leachate Target Values' including but not limited to: 	Water Treatment Plant Management Plan HAKK Temporary Water Treatment Plant (TWTP), Document Number 105079-Q-1000, Rev B2 dated 12 December 2021 (prepared by Enviro Pacific Services) Date of operation of TWTP: 9 January 2023 DPHI (formerly DPIE) letter presented dated 14 March 2022 that the submitted TWTP Management Plan satisfies the requirements of the Department. Evidence of consultation with the EPA is provided in the plan under Appendix 1. EPA letter dated 20 January 2022, ref DOC22/33303-1 in response to Ramboll email to EPA received 18 January 2022, with the following comments: <i>The EPA encourages the development of such plans to ensure that proponents and licensees have determined how they will meet their statutory obligations and designated environmental objectives. Being a regulatory authority, the EPA's role is to administer and regulate statutes for environmental management and protection. As such the EPA does not directly get involved in the development of strategies to achieve those objectives and does not review or comment on such plans. Accordingly, the EPA has not reviewed and offers no comments on the above management plan.</i> (a) Section 2 TWTP Design (b) Section 3 Commissioning and Testing Plan: <ul style="list-style-type: none"> (i) Section 3.3, commissioning phases (ii) Section 3.3, verification process for performance testing and close out 		Compliant

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			(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.	(c) Section 4.3 Operational Methodology including Figure 4 flowchart (d) Section 4.2 and Section 4.3 outlines the steps to be taken if the Treated Leachate Target Values are not met i.e. leachate to be pumped into leachate pond for re-testing. (e) Section 5 Decommissioning of the TWTP. Sighted email from Daracon to Enviro Pacific: "Demobilisation of TWTP – Notice to commence demobilisation – Wednesday 17 th April 2024". Confirms no further leachate presented for treatment and that demobilisation can commence of the Water Treatment Plant. Prior to this, email sighted from Hydro to Daracon on 12 April 2024 stating that Daracon can inform Enviro Pacific that the TWTP can be demobilised with the LD03 leachate pond to also be decommissioned, and the liner sent to Central Waste Station.		
3.21	B	B19B	Fluoride Treatment 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.	TWTP Commissioning Report by Enviro Pacific dated 31 October 2022, Doc No. 105079-RP-001 Rev A. Includes: Commissioning timeline under Section 5. Process outlined under Section 7 for batches 1-3 with summary under Table 3. Section 8 – Process Proving Round 2 (Batches 4-6) with summary under Table 4. Section 9 – Process Proving Round 3 (Batches 7 & 8) with summary under Table 5. Three successful commissioning trials were undertaken with raw and treated leachate samples sent to a NATA accredited laboratory for analysis against performance requirements, including target values for fluoride, as sighted: ALS Environmental Certificate of Analysis dated 20 December 2022 and issued 9 January 2023, work order ES2246140-AA, Sample ID 221220 HAKK TW 7 (0.2) and 221220 HAKK TW 8 (0.3) + ES2246140-AB, Sample ID 221220 HAKK RW 7+8.		Compliant

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				The TWTP commenced operation 9 January 2023.		
3.22	B	B19C	Irrigation Management Plan 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: <ul style="list-style-type: none"> (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: <ul style="list-style-type: none"> (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: <ul style="list-style-type: none"> (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. 	Hydro Remediation Irrigation Management Plan, 318000737, Rev 2 dated 14 November 2022 (by Ramboll). DPHI letter dated 1 April 2022 that the submitted TWTP Irrigation Management Plan (Rev 1 dated March 2022) satisfies the requirements of the Department. The TWTP commenced operation on 9 January 2023 Evidence of consultation with the EPA is provided in the plan – Appendix 1: EPA letter dated 20 January 2022, ref DOC22/33303-1 in response to Ramboll email to EPA received 18 January 2022, with the following comments: <i>The EPA encourages the development of such plans to ensure that proponents and licensees have determined how they will meet their statutory obligations and designated environmental objectives. Being a regulatory authority, the EPA's role is to administer and regulate statutes for environmental management and protection. As such the EPA does not directly get involved in the development of strategies to achieve those objectives and does not review or comment on such plans. Accordingly, the EPA has not reviewed and offers no comments on the above management plan.</i> (a) As per Figure 2-1 showing irrigation area north of site, adjacent to Swamp Creek. (b) Section 4.2 North East Dam Operating Rules. The plan also cross references with the TWTP (c) Section 3.1.1 details monitoring. The plan also cross references with the TWTP (d) Section 4.3 Trigger action response protocol addresses (i) to (iii) + the TWTP as cross referenced. (e) Section 4 for operating rules (f) Section 3..1.2 addresses the TARP (except (ii) which is not applicable). The TWTP is also cross-referenced.		Compliant

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3.23	B	B19D	Water Quality Monitoring Program 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: <ul style="list-style-type: none"> (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 	Temporary Water Treatment Plant Water Quality Monitoring Program as prepared by Ramboll, Rev 1 dated 14 November 2022. Evidence of consultation with the EPA is provided in the plan as Appendix 2, letter dated 20 January 2022, ref DOC22/33303-1 (submitted in response to the TWTP, and Irrigation Management Plan). The TWTP commenced operation 9 January 2023. <ul style="list-style-type: none"> (a) Appendix 1 – Figures identifies the monitoring locations including north dams and downstream (b) Section 5.3 Field Parameters (lists pH, EC, Redox, Dissolved Oxygen, Turbidity, Temperature) and Section 5.4 Laboratory Analytical Methodology (lists Fluoride, Cyanide, PAHs, TRH/BTEX, PFAS, Heavy Metals – total and dissolved). Table 5-4 Analytical Methods and PQLs for water samples e.g., Analyte: Aluminium, Method Code: ICP-MS, PQL: 0.01mg/L (c) Section 5.2 Field Sampling Methodology + Table 5-3 Sampling Methodology. 		Compliant
	B		TRAFFIC AND ACCESS			
3.24	B	B20	Remediation Works Conditions The Applicant must ensure that: <ul style="list-style-type: none"> (a) the development does not result in any queuing on the public road network unless otherwise approved by the relevant council; (b) all vehicular movement to and from the site must be in a forward direction; (c) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant AUSTROADS guideline; (d) all loading and unloading of materials are carried out on-site in designated areas; and 	Traffic Management Plan (TMP) Rev 0 ref AS130415 dated 23 December 2020 developed by Ramboll and unchanged since the previous audit. <ul style="list-style-type: none"> (a) Table 3-2 Access Management Measures (SAP/TMP) > includes action to prohibit queuing on the public road network unless otherwise approved by Council, prior to and during activities. Responsibility of the Project Manager. No instances of queuing on public roads recorded to date. (b) Table 3-2 Access Management Measures (SAP/TMP) > states all vehicle movement to and from the site will be in a forward direction 		Compliant

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			(e) vehicle manoeuvring areas must always be kept clear of any obstacles, including parked cars.	<p>during activities. Responsibility of the WHS Manager.</p> <p>(c) Section 2.1 Internal Road Network (SAP) > the internal access roads have been designed in accordance with the Austroads Guide to Road Design Part 3: Geometric Design (2016)</p> <p>(d) Table 3-2 Traffic Management Measures (TMP) > confirms the ongoing loading and unloading of materials are carried out on-site in designated areas. Responsibility nominated to Remediation and Demolition Contractors. See also Demolition CEMP and Remediation IPMP (Appx 3).</p> <p>(e) Table 3-2 Access Management Measures (SAP) > confirms vehicle manoeuvring areas will always be kept clear of any obstacles, including parked cars, during activities. Responsibility nominated to WHS Manager.</p>		
3.25	B	B21	Parking The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the development does not utilise public streets or public parking facilities.	Traffic Management Plan (TMP) Rev 0 ref AS130415 and Smelter Access Plan (SMP) Rev 0 ref AS130415 both dated 23 December 2020, developed by Ramboll, and both include Table 3-2 which confirms sufficient parking available on site as per previous audit. Remediation is now complete with parking still available to Hydro personnel.		Compliant
3.26	B	B22	Long-term Access The Applicant must ensure ongoing access to the containment cell for maintenance works is provided in perpetuity in accordance with the VPA in Condition A5.	<p>The planning agreement referred to in Condition A5 includes reference to the provision of ongoing access to the containment cell.</p> <p>Sub-division to create 2 lots for the access and under the VPA to maintain the access.</p> <p>Previous approval as per DPHI letter dated 14 February 2024 approval of subdivision. Issued 20 November 2024 to DPHI with letter attached – modification to boundary, as approved by Council. Email from Hydro dated 25 November 2024 – notifying DPHI for change in boundary.</p>		Compliant

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				DA approval of Lot 7 for public access and Lot 5 private access road to retain access for maintenance to the Containment Cell. Reference SVPA2021-05 – IRF24/301 referring to letter 6 December 2023 for approval of Containment Cell Subdivision Plan.		
	B		WASTE MANAGEMENT			
3.27	B	B23	Statutory Requirements All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.	Waste Management Plan (WMP) Rev 0, ref 318000533 dated 23 December 2020 is unchanged since the previous audit. Section 2.3.3 Waste Tracking, Transport and Disposal and Table 3-2 states that waste must be removed off site by a licenced contractor and transported to a licenced waste facility. A Waste Consignment Authorisation must be obtained, prior to transporting waste, for each type of waste to be disposed of. The licenced waste contractor who removes the waste is responsible for completing the Waste Consignment Authorisation. The types, quantity and receiving location for all wastes transported from the Smelter will be recorded within a database. Evidence presented as follows: Weighbridge Docket No. DC-069461 dated 15 August 2023 for thermal solve, e.g., Delivery Docket No. 2149410. Dow Chemicals VIC. Line materials offsite to local facility – Central Waste Station e.g., Docket 1 December 2023 Docket No. 174800.		Compliant
3.28	B	B24	Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal, except as expressly permitted by an EPL.	No waste generated outside the site was received. Note: a variation to EPL 1548 was approved by the EPA on 15 February 2022 to allow for aluminium dross from Tomago Aluminium to be temporarily stored at the scheduled premises. This was due to the processing facility (Weston Aluminium) for the aluminium dross being damaged by fire in November 2021 and no longer able to process. Tomago Aluminium had no remaining storage space, and the Project site was identified as a		Compliant

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				<p>suitable alternative storage facility. These wastes, however, are not associated with the project.</p> <p>On 24 February 2023 the sheds used for the storage of the dross was removed from the scheduled premise for Hydro's EPL and is now covered by a separate EPL issued to Tomago Aluminium.</p>		
3.29	B	B25	The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (NSW EPA, November 2014), or its latest version and dispose of all wastes to a facility that may lawfully accept the waste.	No removal associated applicable to this consent.		Not Triggered
3.30	B	B26	The Applicant must retain all sampling and waste classification data in accordance with the requirements of the EPA.	<p>Waste Classification Report dated 14 May 2024 by Enviro Pacific for TWTP waste material. Section 2.4 Waste Classification – classification confirmed as restricted solid waste (RSW) and removed to Kemps Creek. Sighted: Cleanaway Docket No. KEM130182339.0 dated 30 May 2024.</p> <p>Annual Waste Management Report actioned during the audit period 2018 to 2023. Includes 2022 SPL Recycling Status. Includes email from Regain to Hydro dated 22 December 2022 confirming the last of the recyclable SPL was collected 21 December 2022 and Regain equipment removed.</p> <p>Waste classification data will be included with the submission of the Remediation Validation Report currently being prepared.</p>		Compliant
3.31	B	B27	<p>Pests, Vermin and Priority Weed Management</p> <p>The Applicant must:</p> <ul style="list-style-type: none"> (a) implement suitable measures to manage pests, vermin and declared priority weeds on the site; and (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or priority weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area. 	<p>Biodiversity Management Plan (BMP) updated during the audit period, now Rev 1, ref 318000533, 10 August 2023 (Hydro Kurri Kurri EMP_Appendix I_FINAL_REV 1_Biodiversity_20230810.docx). Updated for reduction of clearing boundary.</p> <ul style="list-style-type: none"> (a) identifies 2.1.3 Weed Species > Table 2-2 Noxious Weeds within the Cessnock and Maitland LGAs, and Section 2.1.4 Vertebrate Pest Species. 		Compliant

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			<p>Note: For the purposes of this condition, 'priority weed' has the same definition as the term in the Biosecurity Act 2015.</p>	<p>(b) Section 4.1 Monitoring – weekly inspections</p> <p>No pests or vermin issues.</p> <p>Weekly inspections by Hydro encompass weed management e.g., Inspection actioned following earth tremor on 23 August 2024 as notified by EPA on 24 August 2024, includes Item 12. Weed control measures being adhered to – compliance achieved – notes removal of 5 x pampas grass plants.</p> <p>Ongoing maintenance of containment cell landscaping as per Daracon monthly reports e.g., Containment Cell Revegetation Management Report No. 2 – October 2024 presented as evidence. Includes status of planting and photos e.g., individual tube stock planting.</p>		
	B		AIR QUALITY			
3.32	B	B28	<p>Dust Minimisation</p> <p>The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.</p>	<p>Air Quality Management Plan (AQMP) Rev 0, ref 318000533 dated 23 December 2020 includes Table 3-2 Air Quality Management Measures. The plan is unchanged during the audit period. Dust was noted within the inspection reports e.g., Daracon Environmental Inspection dated 18 October 2023 under Erosion and Sediment Controls – Dust with comment noted: water cart in use.</p>		Compliant
3.33	B	B29	<p>The Applicant must ensure that:</p> <ul style="list-style-type: none"> (a) trucks and vehicles entering and leaving the site that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading; (b) remediation works are not carried out during adverse meteorological conditions; (c) any works are carried out progressively on site to minimise exposed surfaces; (d) all operations and activities occurring during the remediation works must be carried out in a manner that minimises the emissions of air pollutants from the Development; and 	<p>The AQMP is unchanged since the previous audit and details the following as per Table 3-2 Air Quality Management Measures:</p> <ul style="list-style-type: none"> (a) All vehicles leaving the Smelter or Hydro Land and travelling on public roads must be loaded and managed to avoid generation of dust. Any dust, soil or other Smelter-related materials deposited on public roads from Smelter vehicles will be removed as soon as practicable. (b) Works will cease in the event that adverse meteorological conditions or extraordinary 		Compliant

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			(e) trucks associated with the development do not track dirt onto the public road network.	<p>events lead to conditions that cause unacceptable dust generation.</p> <p>(c) Watering to be undertaken where practicable during induced demolition of buildings and structures. Watering of demolition areas and unsealed access roads during dusty conditions and if dust is noticed above the wheel height of vehicles. Watering of the crushing plant during the crushing of concrete and bricks.</p> <p>(d) Where possible vehicles and machinery will be turned off or throttled down when not in use. Vehicles and machinery will be maintained in accordance with manufacturer's requirements to maximise operational efficiencies and associated exhaust emissions.</p> <p>(e) Where possible, vehicles will use existing sealed roads to minimise dust generation. A speed limit of 20 km/hour will be imposed on internal roads. Sealed roads at the Smelter will be cleaned of dirt and other deposited material that could generate dust. As per photos during site inspection, roads were clear of mud and dust.</p>		
3.34	B	B30	<p>Air Quality Management Plan</p> <p>Prior to the commencement of remediation works, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Planning Secretary. The AQMP must form part of the RWEMP required by Condition C2 and be prepared in accordance with Condition C1. The AQMP must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person(s); (b) detail all emission sources including odour and particulates from all remediation works; (c) describe the control measures that will be implemented for each emission source to minimise the potential risks to adverse air quality in the area, including the nominated measures described in the RAP; (d) detail the contingency measures to be implemented to respond to complaints or if dust impacts are identified; 	<p>Air Quality Management Plan (AQMP) Rev 0 ref 318000533, dated 23 December 2020, developed by Ramboll is unchanged since the previous audit and was approved by DPHI as part of the RWEMP Plans including: "Kurri Kurri Smelter Decommissioning and Remediation Air Quality Management Plan, prepared by Ramboll, Final Revision 0, dated 23/12/2020", was presented as evidence.</p> <ul style="list-style-type: none"> (a) The AQMP was prepared by Ramboll Australia and includes under Appendix 1 the AQMP Preparation Team Details, including the names, roles, qualifications, years of experience, and relevant Air Quality Monitoring and Management Experience of the team. (b) Section 2.3 Potential Impacts details the emission sources including hazardous materials, plant and equipment, concrete and refractory crushing plant, stockpile 		Compliant

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			<p>(e) include record keeping, a complaints register and compliance report to identify the control measures that will be implemented for each emission source; and</p> <p>(f) show the locations of five dust monitors with appropriate trigger values and report on the performance of the remediation works in relation to the results from the five dust monitoring stations when compared to the applicable NSW EPA <i>Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales</i> (NSW EPA 2017) and National Environment Protection (Ambient Air Quality) Measure (NEPC 2016).</p>	<p>management and environmental controls, material storage, demolition of structures including explosive techniques, excavation and earthworks (including Containment Cell preparation, contaminated soil removal, Capped Waste Stockpile), material transport (including gypsum and contaminants), movement of vehicles / machinery, odour / air contaminant emissions including asbestos.</p> <p>(c) Section 3, Table 3-2 Air Quality Management Measures details the control measures, actions, risks, timing / frequency, and further detail for each emission source e.g. Transportation > During remediation, all vehicles transporting gypsum on public roads will have covered loads. Load levels will not exceed the height of the truck, reducing the material's potential wind and draft exposure. The gypsum will be unloaded and stored within the specified enclosed shed.</p> <p>(d) Table 3-2 confirms a 24hr number is used for complaints. Dust suppression will be applied during activities e.g. watering of areas and water sprays on equipment, use of sealed roads to minimise dust generation, and modify or suspend works when strong winds are forecast.</p> <p>(e) Section 4.5 Complaints states that the handling of complaints will be undertaken in accordance with the RWEMP. Section 3.5.6 Complaints of the RWEMP states that correspondence relating to community complaints are filed by the Hydro Project Manager or Hydro Environmental Officer through the on-line Hydro Incident Reporting System.</p> <p>(f) AQMP Appendix 2 – Dust Deposition Monitoring Locations shows five dust monitors surrounding the project site – DDG1 to DDG5. Section 4.1 confirms the monitors were established in December 2016, six months prior to demolition. Specifically, Section 4.1 Impact Assessment Criteria details</p>		

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				that the air quality assessment criteria applicable to the site are those specified by the NSW Environment Protection Authority (NSW EPA) within the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i> (2005). Air quality compliance for dust generating activities impacts from PM10 and total suspended particulate (TSP) matter are considered the most relevant pollutants. Through the results at the five dust deposition monitoring stations, an annual incremental impact of deposited dust is estimated at 2g/m2/month. Appendix 3 – Dust Deposition Gauges Monitoring Results shows results from Nov-2016 to Jul-2020 with levels below the criteria aside from a spike period occurring in Dec-2020. Section 4 also confirms that internal and external environmental reporting requirements will be undertaken in accordance with the RWEMP.		
3.35	B	B31	<p>The Applicant must:</p> <ul style="list-style-type: none"> (a) not commence remediation works until the AQMP required by Condition B32 is approved by the Planning Secretary; and (b) implement the most recent version of the AQMP approved by the Planning Secretary for the duration of the remediation works. 	<ul style="list-style-type: none"> (a) As previously evidenced, DPHI letter dated 25 January 2021, approving RWEMP Plans which includes the: “Kurri Kurri Smelter Decommissioning and Remediation Air Quality Management Plan, prepared by Ramboll, Final Revision 0, dated 23/12/2020”. Remediation Works commenced 27 January 2021. (b) Five dust gauges DDG1-DDG5 were in use during the works. Results for data from January 2018 to November 2023. Spikes recorded January 2022 with justification noted i.e.,: Ash content at DDG4 (over PM 2.5), Combustible Material at DDG1 (just under PM 2.5), Total Insoluble Material at DDG4 over 4. Results recorded within Compliance Report. Exceedances due to bushfires. DDGs removed December 2023. Activities at this time were minimal. <p>Asbestos material was previously stored onsite. Asbestos Removal Control Plan in place at the time –</p>		Compliant

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				<p>reference Doc No. EP-HSE-13-FRM-01 dated 9 January 2023.</p> <p>Daily Air Monitoring Results – by Prensa e.g., Report No. 110516S.022AR dated 5 April 2023 actioned by LAA No. LAA001580.</p> <p>Daily Air Monitoring Results by Prensa e.g., Report No. 110516S.171AR dated 1 November 2023.</p> <p>Distributed by Enviro Pacific. 4 monitors were placed around the Containment Cell during the works; however, additional monitors would be used depending on the work e.g., during Capped Stockpile Works removal.</p>		
3.36	B	B32	Odour Management <p>The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).</p>	No instances of odour to date.		Compliant
3.37	B	B33	Gas Monitoring <p>Two months prior to the completion of filling of the containment cell, the Applicant must prepare a Gas Monitoring Plan (GMP) to the satisfaction of the Secretary. The GMP must form part of the LTMP required by Condition B7. The GMP must:</p> <ul style="list-style-type: none"> (a) describe the location, frequency and duration of gas monitoring; (b) outline trigger levels for the implementation of contingency measures; and (c) contain a range of contingency measures to respond to exceedances of the trigger levels. 	<p>Filling of the Containment Cell was completed on 21 February 2024, with the draft LTMP submitted to the Department November 2023. The LTMP included the Gas Monitoring Plan as an appendix and met the timeframe requirements of Condition B33 (two-months prior to completion of filling the containment cell).</p> <p>Gas Monitoring Plan updated, appendix to the LTMP dated 1 February 2024 (Rev D1).</p> <p>Updated as Rev 1 dated 22 April 2024 and was submitted via the Project Portal on 23 April 2024.</p> <p>Response from DPHI received 24 June 2024 – the Department is requesting additional information before accepting the document: <i>Please update the gas monitoring plan to include contingency measures for any exceedances.</i></p> <p>The plan was updated to address DPHI comments: Containment Cell Gas Monitoring Plan, 318000980 Gas</p>		Compliant

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				<p>Monitoring Plan_v1.1 240903.docx, Rev 1.1. dated 3 September 2024.</p> <p>(a) location (Section 2.1), frequency (Section 2.2, Section 2.5), and duration of gas monitoring</p> <p>(b) Section 2.3 Landfill Gas Trigger Levels</p> <p>(c) Section 2.6 refers to Table 4-2 of the LTMP which notes the Contingency Process</p> <p>First round of gas measurement actioned 15 August 2024 for gas concentration and flow - field sheet sighted – no visual issues. No flow. Methane readings at 4.7% but no flow behind it. 5.9% oxygen, CO2 36%, LE max'd out at 5% (100%).</p>										
	B		NOISE											
3.38	B	B34	<p>The Applicant must comply with the hours detailed in Table 1, unless otherwise agreed in writing by the Planning Secretary.</p> <p>Table 1 Hours of Work</p> <table><tr><th>Activity</th><th>Day</th><th>Time</th></tr><tr><td rowspan="2">Remediation works</td><td>Mondays – Fridays</td><td>7 am to 6 pm</td></tr><tr><td>Saturdays</td><td>7 am to 1 pm</td></tr></table>	Activity	Day	Time	Remediation works	Mondays – Fridays	7 am to 6 pm	Saturdays	7 am to 1 pm	<p>Noise and Vibration Management Plan (NVMP) Rev 0, ref 318000533, dated 23 December 2020, approved by DPHI as per letter dated 25 January 2021. No changes during the audit period.</p> <p>Section 2.3 Hours of Operation defines activities to be undertaken Mondays to Fridays between 7am and 6pm and Saturdays 7am to 1pm.</p>		Compliant
Activity	Day	Time												
Remediation works	Mondays – Fridays	7 am to 6 pm												
	Saturdays	7 am to 1 pm												
3.39	B	B35	<p>Works outside of the hours identified in Condition B36 may be undertaken in the following circumstances:</p> <p>(a) works that are inaudible at the nearest sensitive receivers;</p> <p>(b) works agreed to in writing by the Planning Secretary; and</p> <p>(c) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.</p>	<p>Out of standard hours works were undertaken from 20 November 2023 to 23 February 2024. Ramboll on behalf of Hydro submitted a letter on 14 November 2023 notifying the Department of the proposed out of standard hours works “SSD 6666 Hydro Remediation Project: Notification of Out of Hours Works” – proposed night time works for the installation of the Containment Cell capping liners occurring from late November 2023 to February 2024 (breaking from 22 December 2023 to 7 January 2024 inclusive). Shifts proposed:</p> <ul style="list-style-type: none">Monday 6:00pm to Tuesday 7:00amTuesday 6:00pm to Wednesday 7:00amWednesday 6:00pm to Thursday 7:00amThursday 6:00pm to Friday 7:00am		Compliant								

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				<ul style="list-style-type: none"> Friday 6:00pm to Saturday 7:00am <p>Requested for the cell lining material which is black and extra absorbent with night time allowing the liner installation to cool – for safety reasons and for the quality and integrity of the process. Use of plant noted within letter. Submitted as per portal receipt reference SSD-6666-PA-27. Works noted to be inaudible at the nearest sensitive receiver as per B35(a).</p>		
3.40	B	B36	Remediation Works Noise Limits Remediation works must be undertaken to achieve the construction noise management levels detailed in <i>the Interim Construction Noise Guideline</i> (DECC, 2009) (as may be updated or replaced from time to time). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures in the Appendix 2 of this development consent and outlined in <i>the Interim Construction Noise Guideline</i> (DECC, 2009).	Noise and Vibration Management Plan (NVMP) Rev 0, ref 318000533, dated 23 December 2020 – noise and mitigation measures unchanged since the previous audit. Appendix 3 – Noise Criteria Levels at Identified Sensitive Receivers outlines the receiver, daytime, evening, night-time criteria. HAKK Basin Lining Noise Monitoring undertaken as per Noise Monitoring Report by Daracon, Issue No. 1 dated 18 February 2022. Equipment used: 01db METRAVIB smart noise monitor, Class 1, Serial No. 12641, Calibrated 3 March 2021 (next due March 2022 – within calibration at the time). Three locations monitored (with Figure 1 showing map of monitors and sensitive receivers): <ol style="list-style-type: none"> Horton Road, Loxford Bishops Bridge Road, Loxford Dawes Road, Loxford Three exceedances were noted; however it was determined that these were not due to the works and was a result of highway traffic noise, birdlife, frogs and cicadas. No noise complaints received to date.		Compliant
3.41	B	B37	Vibration Criteria	NVMP Section 4.1.2 Vibration makes reference to Assessing Vibration: A Technical Guideline (DECC, 2006), and DIN 4150-3 Structural Vibration Part 3:		Compliant

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			<p>Vibration caused by the remediation works at any residence or structure outside the site must be limited to:</p> <ul style="list-style-type: none"> (a) for structural damage: German Standard DIN 4150 Part 3 Structural Vibration in Buildings; and (b) for human exposure: the acceptable vibration values set out in Environmental Noise Management Assessing Vibration: A Technical Guideline (DECC, 2006). 	<p>Effects on buildings and structures with limitation on levels to occur when a complaint is received. The vibration dose values (VDV) levels are presented in Table 4-1 Acceptable vibration values for intermittent vibration in various buildings (m/s^{1.75}).</p> <p>The nearest receivers to the Smelter are located approximately 270 metres to the south of the Smelter. The Noise and Vibration Impact Assessment prepared for the EIS predicted that it is unlikely that there would be any vibration impacts generated by plant that would give rise to annoyance or structural damage at this or any of the nearest receivers. Vibration monitoring would be undertaken in response to any community complaints as described in the NMP. No complaints have been received in relation to vibration.</p>		
	B		ABORIGINAL HERITAGE			
3.42	B	B38	<p>To prevent impacts to subsurface archaeological deposits, stockpiles in the area of high archaeological sensitivity, as shown in Figure 23 of the Aboriginal Cultural Heritage Assessment and titled <i>Archaeological Sensitivity Figure</i>, must be placed on geo-matting.</p>	Condition removed as per Modification 2 of SSD-6666 dated March 2022.		Not Triggered
3.43	B	B39	<p>Unexpected Finds Protocol</p> <p>If any previously unidentified item or object of Aboriginal heritage significance is identified on site:</p> <ul style="list-style-type: none"> (a) all work in the immediate vicinity of the suspected Aboriginal item or object must cease immediately; (b) a 10 m wide buffer area around the suspected item or object must be cordoned off; and (c) Biodiversity and Conservation Division, Environment, Energy and Science Group of the Department must be contacted immediately. 	No unexpected Aboriginal finds have been identified to date.		Not Triggered
3.44	B	B40	<p>Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i> (NSW).</p>	No unexpected Aboriginal finds have been identified to date.		Not Triggered

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	B		BIODIVERSITY			
3.45	B	B41	<p>Prior to vegetation clearing for remediation works, or within another timeframe agreed with the Planning Secretary, the Applicant must retire:</p> <p>(a) 155 ecosystem credits, including:</p> <p>(i) 94 ecosystem credits for removal of 1.35 ha of Parramatta Red Gum – Narrow-leaved Apple – Prickly-leaved Paperbark shrubby woodland in the Cessnock Kurri Kurri area; and</p> <p>(ii) 61 ecosystem credits for removal of 1.15 ha of Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Box shrub-gross open forest of the lower Hunter; and</p> <p>(b) 582 species credits, including:</p> <p>(i) 19 species credits for Green-thighed frog (Litoria brevipalmata);</p> <p>(ii) 35 species credits for Koala (Phascolarctos cinereus);</p> <p>(iii) 313 species credits for Southern Myotis (Myotis macropus);</p> <p>(iv) 89 species credits for Regent Honeyeater (Anthochaera phrygia);</p> <p>(v) 56 species credits for Eucalyptus parramattensis subsp. decadens (Eucalyptus parramattensis subsp. decadens); and</p> <p>(vi) 70 species credits for Small flower Grevillea (Grevillea parviflora subsp. parviflora).</p> <p>to offset the removal of 2.5 hectares of vegetation on site.</p>	Condition removed as per Modification 2 of SSD-6666 dated March 2022.		Not Triggered
3.46	B	B41	<p>Prior to vegetation clearing for remediation works, or within another timeframe agreed with the Planning Secretary, the Applicant must retire:</p> <p>(a) 98 ecosystem credits, including:</p> <p>(i) 68 ecosystem credits for removal of 0.97 ha of Parramatta Red Gum – Narrow-leaved Apple –</p>	<p>Vegetation clearance commenced on 28 January 2021.</p> <p>As previously evidenced, the Department issued a letter to Hydro dated 12 March 2021 that it reviewed Hydro's request (dated 19 February 2021) to amend the timeframe for the retirement of credits, and the Department confirmed that they needed to be retired within two years of the commencement of remediation</p>		Compliant

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			<p>Prickly-leaved Paperbark shrubby woodland in the Cessnock-Kurri Kurri area; and</p> <p>(ii) 30 ecosystem credits for removal of 0.56 ha of Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Box shrub-gross open forest of the lower Hunter; and</p> <p>(b) 96 species credits, including:</p> <p>(i) 5 species credits for Green-thighed frog (<i>Litoria brevipalmata</i>);</p> <p>(ii) 25 species credits for Koala (<i>Phascolarctos cinereus</i>);</p> <p>(iii) 9 species credits for Southern Myotis (<i>Myotis macropus</i>);</p> <p>(iv) 43 species credits for Regent Honeyeater (<i>Anthochaera phrygia</i>);</p> <p>(v) 14 species credits for <i>Eucalyptus parramattensis</i> subsp. <i>decadens</i> (<i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>); and</p> <p>to offset the removal of 1.53 hectares of vegetation on site.</p> <p>Note:</p> <p><i>If the Applicant seeks a variation to the offset rules, the Applicant must demonstrate that reasonable steps have been taken to find like-for-like offsets in accordance with Section 10.5.4.2 of the FBA and Appendix A of the OEH's NSW Biodiversity Offsets Policy for Major Projects 2014.</i></p>	<p>works. As remediation works commenced on 27 January 2021, the latest date by which biodiversity credits must be retired is 26 January 2023. This condition was updated from the above for reduced clearing and credits</p> <p>Hydro received a Statement confirming payment into the Biodiversity Conservation Fund for an offset obligation dated 5 May 2022, BCT ref BCF353, signed by the NSW Biodiversity Conservation Trust 9 May 2022 for the retirement of:</p> <p>(a) 62 ecosystem credits, including:</p> <p>(i) 43 ecosystem credits for removal of 0.97 ha of Parramatta Red Gum – Narrow-leaved Apple – Pricklyleaved Paperbark shrubby woodland in the Cessnock-Kurri Kurri area; and</p> <p>(ii) 19 ecosystem credits for removal of 0.56 ha of Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Box shrub-gross open forest of the lower Hunter; and</p> <p>(b) 96 out 96 ecosystem credits, including:</p> <p>(i) 5 species credits for Green-thighed frog (<i>Litoria brevipalmata</i>);</p> <p>(ii) 25 species credits for Koala (<i>Phascolarctos cinereus</i>);</p> <p>(iii) 9 species credits for Southern Myotis (<i>Myotis macropus</i>);</p> <p>(iv) 43 species credits for Regent Honeyeater (<i>Anthochaera phrygia</i>); and</p> <p>(v) 14 species credits for <i>Eucalyptus parramattensis</i> subsp. <i>Decadens</i> (<i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>).</p>		
3.47	B	B42	Biodiversity Management Plan	A Biodiversity Management Plan (BMP) as developed by Ramboll Australia Pty Ltd is now Rev 1, ref		Compliant

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			<p>Prior to vegetation clearing for remediation works, the Applicant must prepare a Biodiversity Management Plan (BMP) for the development in consultation with the Biodiversity and Conservation Division of the Department to the satisfaction of the Planning Secretary. The BMP must be approved by the Planning Secretary prior to the commencement of clearing for remediation works and must form part of the RWEMP in accordance with Condition C2. The BMP must include the following:</p> <ul style="list-style-type: none"> (a) pre-clearing surveys; (b) supervision during vegetation clearing; (c) hygiene protocols, including vehicle wash-down, for all plant machinery; and (d) nest box installation and a monitoring strategy to compensate for hollow bearing tree loss. 	<p>318000533, 10 August 2023 (updated for changes for Mod-2).</p> <p>The original BMP was approved on the 25 January 2021 as part of the DPHI letter, approval of the RWEMP and “Hydro Aluminium Kurri Kurri Smelter Decommissioning, Demolition and Remediation Biodiversity Management Plan, prepared by Ramboll, Final Revision 0, dated 23/12/2020”.</p> <p>The BMP – Table 3-2 Biodiversity Management Measures states that any clearance of native vegetation will be undertaken in accordance with the approval conditions and/regulatory requirements, as well as any ecologist recommendations. The Table also includes the following Management Measures and Actions:</p> <ul style="list-style-type: none"> (a) survey and marking of the approved vegetation clearance areas (b) a pre-clearance survey will be undertaken by an appropriately qualified ecologist for the presence of any hollow bearing trees, nests or burrows for native animals. (c) machinery to be used for native vegetation clearance is to be cleaned of mud and any accumulated materials to avoid the importation of weed species seeds or propagules (d) No hollow bearing trees have previously been identified in any areas to be cleared. <p>No ecologist visits / inspections have been required during the audit period.</p>		
3.48	B	B43	<p>The Applicant must:</p> <ul style="list-style-type: none"> (a) not commence vegetation clearing for remediation works until the BMP required by Condition B30 is approved by the Planning Secretary; and (b) implement the most recent version of the BMP approved by the Planning Secretary for the duration of the remediation works. 	<ul style="list-style-type: none"> (a) Original BMP approved on the 25 January 2021 as part of the DPHI letter, approval of the RWEMP and “Hydro Aluminium Kurri Kurri Smelter Decommissioning, Demolition and Remediation Biodiversity Management Plan, prepared by Ramboll, Final Revision 0, dated 23/12/2020”. BMP updated as Rev 1 dated 10 August 2023. All clearing has been complete. (b) Biodiversity Management Plan (BMP) updated during the audit period, now Rev 1, ref 		Compliant

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				<p>318000533, 10 August 2023. Daracon inspections note fauna / flora as an item + truck wheel cleaning. Hydro inspections include No. 14 Effect on Flora and Fauna minimised.</p> <p>DPHI approval letter ref SSD-6666-PA-19 dated 1 July 2024 in response to submission 14 August 2023 and concludes that the changes by the TWTP and amended clearing are addressed. Approval includes:</p> <ul style="list-style-type: none"> RWEMP Final Rev 2 dated 10 August 2023 Soil and Water Management Plan Final Rev 1 dated 10 August 2023 Remediation Biodiversity Management Plan Final Rev 1 dated 10 August 2023 		
	B		VISUAL AMENITY			
3.49	B	B44	<p>Lighting</p> <p>The Applicant must ensure the lighting associated with the development:</p> <ul style="list-style-type: none"> (a) complies with the latest version of AS 4282-1997 - <i>Control of the obtrusive effects of outdoor lighting</i> (Standards Australia, 1997); and (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network. 	No lighting for the Project has been required for installation.		Not Triggered
3.50	B	B45	<p>Landscaping Management Plan</p> <p>Two months prior to the completion of filling of the containment cell, the Applicant must prepare, to the satisfaction of the Planning Secretary, a containment cell Landscaping Management Plan (LMP). The LMP must form part of LTEMP required by Condition B7 and must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with Environmental Services Group of H&P Group or its successors; 	<p>The Landscaping Management Plan (LMP) Rev 1 dated 31 October 2023 was approved by the Department on 13 November 2023 as per letter sighted. Filling of the Containment Cell was completed on 21 February 2024 and therefore approval of the LMP was actioned in advance of the timeframe.</p> <p>Landscaping Management Plan Kurri Kurri Aluminium Smelter Decommissioning, Demolition and Remediation, 31800980, now Rev 2 dated 22 April 2024.</p>		Compliant

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			(b) include provision for the planting of shallow rooted locally endemic grass species and non-invasive hybrid grass species where appropriate; and (c) include details of the management of landscaping post remediation.	(a) Section 2.3.1, Table 2-2: Housing and Property Group Comments and Hydro Response (b) Section 3.2 Seeding and planting (c) Section 3.3 Post-planting management		
3.51	B	B46	The Applicant must implement the most recent version of the LMP approved by the Planning Secretary.	Containment Cell Revegetation Management Report No. 2 – October 2024 presented as evidence. Includes status of planting and photos e.g., individual tube stock planting. Hydro undertakes regular inspections of the Containment Cell and includes checklist item No. 12 – Weed control measures being adhered to.	Note: as per HAKK-02-OFI-02, it is recommended to include more detail within the inspection checklist to demonstrate implementation of the long-term monitoring requirements.	Compliant
	B		HAZARDS AND RISK			
3.52	B	B47	Pre-construction Studies One month prior to the commencement of remediation works (except for preliminary works that are outside the scope of the hazard studies), or within another timeframe agreed to by the Planning Secretary, the Applicant must prepare the studies set out under subsections (a) and (b) below. Remediation works, other than preliminary works, must not commence until study recommendations have been considered and, where appropriate, acted upon. (a) A Fire Safety Study for the development which covers the relevant aspects of the Department's Hazardous Industry Planning Advisory Paper No. 2, ' <i>Fire Safety Study Guidelines</i> ' and the New South Wales Government's ' <i>Best Practice Guidelines for Contaminated Water Retention and Treatment Systems</i> '. The study must meet the requirements of Fire and Rescue NSW. (b) A Construction Safety Study , prepared in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety'</i> . The Construction Safety Study shall also review Appendix 03 of the CCDDR and address all relevant requirements.	As evidenced during the previous audit, DPHI (former DPIE) letter dated 21 May 2021 – Approval of the Pre-Construction Hazards and Risks Studies confirming review of the Comparative Health Risk Assessment was presented as evidence. Also sighted Ramboll letter 8 April 2021 with request. Remediation Works commenced 27 January 2021, 4 months prior to the study which was submitted on 11 March 2021 as stated in the Department's letter. The letter also confirms that the Planning Secretary is satisfied that a separate Fire Safety Study and Construction Safety Study are not required.		Compliant

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3.53 6	B	B48	Pre-commissioning Prior to commencement of filling of the containment cell, the Applicant must develop and implement the plans and systems set out under subsections (a) and (b) below. <ul style="list-style-type: none"> (a) Emergency Plan: the plan must include detailed emergency procedures and be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'. (b) Safety Management System: the system must cover all on-site operations and associated transport activities involving hazardous materials and be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'. 	Filling of the containment cell commenced on 13 February 2023. Ramboll submitted a letter to the Department on behalf of Hydro on 11 March 2021 explaining how the requirements of the Emergency Plan and Safety Management System are included in existing management plans. This approach was confirmed by the Department through a letter issued 21 May 2021 confirming that a separate Emergency Plan and Safety Management System plans are not required and later formalised in Ramboll's pre-start-up compliance report dated February 2022 SSD-6666-PA-15 (and resubmitted in a report style format in July 2022) submitted to the Department on behalf of Hydro.		Compliant
3.54	B	B49	Pre-start-up Compliance One month prior to the commencement of filling of the containment cell, or within another timeframe agreed to by the Planning Secretary, the Applicant must submit to the Planning Secretary a Pre-start-up Compliance Report detailing compliance with Condition B47 and Condition B48.	Filling of the containment cell commenced on 13 February 2023. The Pre-start-up Compliance Report was submitted to the Department via the Project Portal on 1 February 2022. Hydro submitted a letter to the Department dated 1 February 2022 via the Project Portal ref SSD-6666-PA-15. The document was re-issued in a report-style format in July 2022 in response to a request from the Department. A letter and email dated 22 July 2022 was issued by the Department acknowledging compliance with this requirement "Hydro Remediation (SSD-6666) Pre-Construction Studies and Pre-Commissioning Plans"		Compliant
3.55	B	B49A	Dangerous Goods 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.	Chemicals used in the TWTP operations include: <ul style="list-style-type: none"> • Acid (1,000L capacity) • Caustic (1,000L capacity) • Coagulants (500L capacity) • Oxidant (500L capacity) • Flocculent (500L capacity) 		Compliant

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				<p>Compliance with threshold quantities listed in the Department of Planning's Hazardous and Offensive Development Application Guidelines – Applying SEPP 33.</p> <p>Daracon Register: Hazardous Chemicals – Site, Rev 2 dated 3 December 2021 also presented as evidence.</p>		
3.56	B	B49B	<p>Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:</p> <ul style="list-style-type: none"> (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). 	<p>The TWTP became operational January 2023. Photo of TWTP – shows bunded area surrounding the plant.</p> <p>Dangerous goods are stored in a 20' dangerous goods container. Acid and caustic substances used (hydrochloric acid and sodium hydroxide solution) are each stored within a 55kL capacity bund. Filling of chemical tanks is undertaken in accordance with AS 2780:2008 as described in Appendix 1 of the TWTP management plan.</p> <p>Maintenance checks were also carried out on the TWTP daily. Sighted: HAKK Daily Log for March and April 2023.</p>		Compliant
3.57	B	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.	No inconsistencies identified between the requirements of conditions B49B(a) to B49B(c).		Not Triggered
3.58	B	B50	<p>Bunding</p> <p>The Applicant must store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's <i>Storing and Handling of Liquids: Environmental Protection – Participants Manual</i> (Department of Environment and Climate Change, 2007).</p>	<p>Daracon had a small quantity of chemicals, fuels and oils to support the remediation works stored at the Project site. Daracon Register: Hazardous Chemicals – Site, Rev 2 dated 3 December 2021. Inspections include 'Hazardous Chemicals' as an item and would check for the following:</p> <ul style="list-style-type: none"> • Chemicals stored correctly • Relevant Safety Data Sheet (SDS) on site • Contaminants on site <p>Daracon Site Inspection dated 1 July 2023. Photo of TWTP – shows bunded area surrounding the plant, bunded pond, geobags for sludge removal.</p>		Compliant

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3.59	B	B51	Any servicing or repair work of motor vehicles or mobile plant must be carried out within a sealed area that has environmental controls appropriate for servicing or repair work. This must include bunding where this work could result in liquids being spilled.	<p>Regular scheduled maintenance activities undertaken in the following locations:</p> <ul style="list-style-type: none"> adjacent to the temporary Containment Cell access road, on the western side of the cell for scheduled maintenance activities (such as oil changes) at this location. north of the temporary Containment Cell access road, adjacent to sediment basin 3 on the western side. This area is the designated 'clean vehicle maintenance area' <p>Maintenance History Report as dated 31 October 2023 for 3842 Komatsu HM400 Truck sighted. Daracon Pre-Delivery Plant Inspection – For Hired Plant form also presented. Dated 16 March 2023. Notes conformance with checklist including quacker reverse alarm. Signed by Daracon plant mechanic.</p> <p>Due to the site conditions, a clearance certificate was issued for decontamination of the plant: Letter from Prensa dated 13 November 2023 "Asbestos Clearance Certificate – Visual Clearance of Decontaminated Machinery used within Hydro Aluminium Kurri Kurri, Hard Road, Loxford NSW 2327". Details of plant noted as 3842 Komatsu HM400 Truck, 3842 Komatsu HM400 Truck, inspected 13 November 2023. Letter confirms: Prensa hereby deems that the machine being removed from the asbestos work area has been decontaminated to a satisfactory standard.</p>		Compliant
3.60	B	B52	<p>Fire management</p> <p>The Applicant must:</p> <ul style="list-style-type: none"> (a) maintain the existing fire breaks and a service road around the containment cell for the duration of the remediation works; and (b) construct a perimeter road at least 4.6 m wide, around the containment cell on the completion of construction of the containment cell. 	<p>During the site inspection:</p> <ul style="list-style-type: none"> (a) The existing fire breaks around the Containment Cell appear well maintained. The Serviceroad constructed also appeared maintained. (b) Construction of the Containment Cell was completed on 11 January 2023. Construction 		Compliant

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				of the perimeter road has now been completed. Refer to photos.		
	B		COMMUNITY ENGAGEMENT			
3.61	B	B53	<p>The Applicant must prepare a Community Engagement Plan for the development, to the satisfaction of the Planning Secretary. The Plan must:</p> <ul style="list-style-type: none"> (a) be approved by the Planning Secretary within two months of the date of this consent; (b) identify the relevant community including nearby and adjacent landowners, sensitive receivers, relevant regulatory authorities and other interested stakeholders; (c) detail the mechanisms for consulting with the local community throughout the development; (d) identify a community notification area for residents to refrain from using rainwater as a potable water supply during the remediation works; (e) include a complaints handling procedure for recording, responding to and managing complaints. 	<p>Stakeholder and Community Engagement and Notification Plan, ref 22/18982, June 2021 developed by GHD.</p> <ul style="list-style-type: none"> (a) Approved as per previous revision (June 2020), and DPHI approval letter dated 27 July 2021 following resubmission (June 2021). (b) Section 2 Stakeholder analysis, Table 1 - Key project stakeholders (c) Section 6 Engagement tools, Section 7 Stakeholder communication protocols, Table 3 - Engagement tools (d) Refer below* (e) Section 3 Issues and risk management, Table 2 - Issues management, Figure 5-1 Dispute resolution process <p><i>*As reviewed during the previous audit:</i> Section 5.3.2.2 of the Response to Submissions Report (Ramboll, 2020) provided a detailed response as to why deposited dust would not present a risk of harm to those who used water from rainwater tanks as potable water. This included reference to relevant sections of the Human Health Risk Assessment that formed part of the Environmental Impact Statement (EIS) (Ramboll Environ, 2016). The key point from Section 5.3.2.2 of the Response to Submissions Report was to reiterate the following point from the Human Health Risk Assessment that “any potential health risks to users of rainwater tanks in the vicinity of the Project Site are also considered to be negligible”.</p> <p>Hydro emailed a letter to Hunter England Health on 26 February 2021 asking them to confirm that they agree with the above, and the notification of residents is not</p>		Compliant

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				<p>required. On 30 April 2021 Hydro received the letter presented in Appendix 1 confirming that they agreed it was reasonable not to notify residents to refrain from using rainwater as a potable water supply. As such Hydro has not developed a community notification area, and such notification does not form part of this SEP.</p> <p>Hunter New England Health District and Hunter New England Population Health Letter dated 16 April 2021 confirming agreement not to notify residents to refrain from using rainwater as a potable water supply.</p>		
3.62	B	B54	The Applicant must implement the approved Community Engagement Plan for the duration of the development.	Regrowth Kurri Kurri website notes the Community Reference Group (CRG) which met regularly and acted as a liaison point between the community and the project. The group was made up of community representatives from Council, community groups, business groups and local residents. CRG members were encouraged to provide information about the project to interested community members. The CRG held its last meeting February 2024. More information about the CRG is available on the Community Reference Group website. Meeting minutes included for 2023 – Meeting No. 56 dated 17 August 2023. These have now ceased.		Compliant
4	PART	C	ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING			
	C		ENVIRONMENTAL MANAGEMENT			
4.1	C	C1	<p>Management Plan Requirements</p> <p>Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:</p> <ul style="list-style-type: none"> (a) detailed baseline data; (b) details of: <ul style="list-style-type: none"> (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and 	<p>Ramboll Australia prepared the Remediation Works Environmental Management Plan (RWEMP), Rev 0 ref 318000533, 23 December 2020, now revised to Rev 2, 10 August 2023. The RWEMP also includes several sub-plans as appendices.</p> <p>(a) Baseline data has been included in the various sub-plans e.g. Air Quality Management Plan (AQMP) Rev 0, ref 318000533, 23 December 2020 – Section 2.2 and Appx 3; Noise and</p>		Compliant

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			<ul style="list-style-type: none"> (iii) the specific performance indicators that are proposed to be used to judge the performance of, or (iv) guide the implementation of, the development or any management measures; (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; (d) a program to monitor and report on the: <ul style="list-style-type: none"> (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to paragraph (c) above; (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: <ul style="list-style-type: none"> (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and (h) a protocol for periodic review of the plan. <p><i>Note: the Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	<p>Vibration Management Plan (NVMP) Rev 0 ref 318000533, 23 December 2020 – Section 2, Table 2-1.</p> <p>(b) Included under RWEMP Section 2.2 Planning Approvals, 2.3 Licences, 2.4 Legislative and Regulatory Requirements.</p> <p>Performance measures as per sub-plans e.g. sighted Air Quality Management Plan Section 4.2 for relevant limits, performance measures and criteria.</p> <p>Specific performance indicators included in sub-plans e.g. Noise and Vibration Management Plan Section 3.2.</p> <p>As per sub-plans Table 3-2 e.g. Biodiversity Management Plan as part of Section 3.</p> <p>(c) RWEMP Section 4 Implementation defines Environmental Management Activities and Controls, Environmental Management Procedures (Table 4-1 and applicable management plan/sub-plan) and Enquiries and Information (Stakeholder Management Plan) to comply with the relevant statutory requirements, limits, performance measures and criteria.</p> <p>(d) RWEMP Section 3.5 Reporting and Section 5 Monitoring and Review addresses the requirement to monitor and report of the impacts and environmental performance and effectiveness of management measures of the development.</p> <p>(e) RWEMP Section 5.4 Corrective Action defines the process for the implementation of corrective and preventative actions.</p> <p>(f) RWEMP Section 5 Monitoring and Review outlines the process for Inspections, Internal/External auditing and compliance, Corrective Action, RWEMP Review and Improvement (continual improvement), and Remediation Project and RWEMP Modification.</p> <p>(g) RWEMP Section 3.5.4 Environmental Incidents defines the process for incidents</p>		

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				<p>and 3.5.5 for non-compliances, 3.5.6 Complaints, and 5.4 Corrective Action.</p> <p>(h) RWEMP Section 5.5 RWEMP Review and Improvement states that the RWEMP will be revised within three months of the submission of a Compliance Report, Incident Report, Independent Audit, approval of any modification of SSD-6666, and as requested by the Planning Secretary. RWEMP now revised to Rev 2, 10 August 2023.</p>		
	C		REMEDIATION WORKS ENVIRONMENTAL MANAGEMENT PLAN			
4.2	C	C2	<p>The Applicant must prepare a Remediation Works Environmental Management Plan (RWEMP) to the satisfaction of the Planning Secretary in accordance with the requirements of Condition C1. The RWEMP must:</p> <ul style="list-style-type: none"> (a) be approved by the Planning Secretary prior to the commencement of remediation works; (b) identify the statutory approvals that apply to the development; (c) outline all environmental management practices and procedures to be followed during remediation works associated with the development; (d) describe all activities to be undertaken on the site during remediation works, including a clear indication of construction stages; (e) detail how the environmental performance of the remediation works will be monitored, and what actions will be taken to address identified adverse environmental impacts; (f) describe the roles and responsibilities for all relevant employees involved in remediation works associated with the development; and (g) include the management plans required under Condition C3 of this consent. 	<p>DPHI letter ref SSD-6666-PA-19 dated 1 July 2024 “Approval of updated Remediation Works Environmental Management Plan” in response to submission on 14 August 2023 regarding updates to vegetation clearing with approval of Rev 2 dated 10 August 2023.</p> <ul style="list-style-type: none"> (a) Original version approval as per DPHI (formerly DPIE) letter dated 25 January 2021 - Approval of the Remediation Works Environmental Management Plan as previously evidenced for Remediation Works Environmental Management Plan Rev 0 ref 318000533, 23 December 2020 (b) RWEMP Section 2.2 Planning Approvals identifies the statutory approvals applicable to the development (c) RWEMP Section 4 Implementation and Table 4-1, outline the environmental management practices and procedures to be followed e.g. to minimise dust generation and off-site air quality impacts, implement the Air Quality Management Plan (Appx D); protection of water quality and local hydrology – implement Soil and Water Management Plan (Appx F). (d) RWEMP Table 4-1 also outlines the activities associated with the works. Remediation Works are not staged. 		Compliant

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				<p>(e) RWEMP Section 5 Monitoring and Review includes weekly inspections (undertaken by WHS Manager & Environmental Officer), and auditing and compliance reviews (both internal and external). Actions in response to an environmental incident are undertaken as part of the incident investigation process. Non-conformances will be resolved and reported back through the on-line Hydro Incident Reporting System. Any non-compliances with the conditions of SSD 6666 will be reported to the Department within seven days after Hydro becomes aware of the non-compliance (Section 5.4 Corrective Action). Sighted Weekly Inspection Reports e.g. 11 November 2021. Daracon Environmental Inspection Report 29 July 2021.</p> <p>(f) The RWEMP includes roles and responsibilities throughout the plan but specifically described under Section 3.2.1 Project Team and Table 3-1 Hydro Personnel and Environmental Management Responsibilities.</p> <p>(g) The RWEMP also includes management plans required listed as per Condition C3.</p>		
4.3	C	C3	<p>As part of the RWEMP required under Condition C2 of this consent, the Applicant must include the following:</p> <ul style="list-style-type: none"> (a) Containment Cell Management Plan (see Condition B5); (b) Erosion and Sediment Control Plan (see Condition B17); (c) Air Quality Management Plan (see Condition B32); (d) Biodiversity Management Plan (see Condition B44); (e) Health and Safety Plan (see Condition B14); and (f) Community Consultation and Complaints Handling. 	<p>The RWEMP includes the following appendices as per CoC C3:</p> <ul style="list-style-type: none"> (a) Appendix A: Containment Cell Management Plan (b) Appendix F: Soil and Water Management Plan (c) Appendix D: Air Quality Management Plan (d) Appendix I: Biodiversity Management Plan (e) Appendix L: Work Health and Safety Management Plan (f) Appendix K: Stakeholder Engagement Plan <p>The RWEMP also includes other sub-plans applicable to the development e.g. Appendix C Traffic Management Plan, Appendix G Waste Management Plan.</p>		Compliant

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				Implementation of sub-plans as per Conditions B5, B17, B32, B44. The project website was reviewed which includes the Our Community – Community Reference Group > meeting minutes, and Complaints Register under Statutory Information. Only one complaint received to date.		
4.4	C	C4	The Applicant must: (a) not commence remediation works until the RWEMP is approved by the Planning Secretary; and (b) carry out the construction of the development in accordance with the RWEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.	Original RWEMP approved as per DPHI (formerly DPIE) letter dated 25 January 2021 - Approval of the Remediation Works Environmental Management Plan. Remediation works commenced 27 January 2021. DPHI letter ref SSD-6666-PA-19 dated 1 July 2024 "Approval of updated Remediation Works Environmental Management Plan" in response to submission on 14 August 2023 regarding updates to vegetation clearing with approval of Rev 2 dated 10 August 2023.		Compliant
	C		REVISION OF STRATEGIES, PLANS AND PROGRAMS			
4.5	C	C5	Within three months of: (a) the submission of a Compliance Report under Condition C12; (b) the submission of an incident report under Condition C7; (c) the submission of an Independent Audit under Condition C14; (d) the approval of any modification of the conditions of this consent; or (e) the issue of a direction of the Planning Secretary under Condition A2(b) which requires a review, the strategies, plans and programs required under this consent must be reviewed, and the Department must be notified in writing that a review is being carried out.	(a) No changes triggered from Compliance Reports as submitted (b) No incidents to date (c) No findings identified at previous Independent Audit (d) Changes for modifications – cross reference to the IMP and TWTP (Mod-1), updates for bridge clearing area and addressing Condition B30 (Mod-2). However, these were minor amendments only. Correspondence to DPHI of Mod-2 updates to the plans as per SSD-6666-PA-12 on 12 January 2022 for review of the RWEMP (e) No directions from DPHI received.		Compliant

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4.6	C	C6	<p>If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.</p> <p>Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.</p>	<p>No major changes to plans. Changes for modifications – cross reference to the Irrigation Management Plan and TWTP Management Plan (Mod-1 approved 13 September 2021, prior to this audit period) + updating bridge clearing area and addressing Condition B30 (Mod-2 approved 4 March 2022). Changes were minor only and did not affect the environmental performance of the remediation works.</p> <p>DPHI approval letter ref SSD-6666-PA-19 dated 1 July 2024 in response to submission 14 August 2023 and concludes that the changes by the TWTP and amended clearing are addressed. Approval includes:</p> <ul style="list-style-type: none"> • RWEMP Final Rev 2 dated 10 August 2023 • Soil and Water Management Plan Final Rev 1 dated 10 August 2023 • Remediation Biodiversity Management Plan Final Rev 1 dated 10 August 2023 	<p>HAKK-02_NC-04:</p> <p>Based on the evidence presented, updates to the RWEMP were not submitted to DPHI within 6-weeks of the notified review for Mod-2 updates. Mod-2 was approved March 2022, however the RWEMP (dated 10 August 2023) was not submitted to DPHI until 14 August 2023.</p> <p>Given that remediation is now complete, it is recommended to action a lessons learnt to review any areas for improvement and apply to future learnings.</p>	Non-Compliant
	C		REPORTING AND AUDITING			
4.7	C	C7	<p>Incident Notification, Reporting and Response</p> <p>The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 4.</p>	No incidents have occurred to date.		Not Triggered
4.8	C	C8	<p>Non-Compliance Notification</p> <p>The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.</p>	No non-compliances.		Not Triggered
4.9	C	C9	A non-compliance notification must identify the development and the application number for it, set out the condition of consent that	No non-compliances.		Not Triggered

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			the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.			
4.10	C	C10	A non-compliance which has been notified as an incident does not need to also be notified as a noncompliance.	No incidents or non-compliances to date.		Not Triggered
4.11	C	C11	Compliance Reporting Within three months after the commencement of remediation works, and in the same month each subsequent year (or such other timing as agreed by the Planning Secretary), the Applicant must submit a Compliance Report to the Planning Secretary reviewing the environmental performance of the development to the satisfaction of the Planning Secretary. Compliance Reports must be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department, 2020) and must also: <ul style="list-style-type: none"> (d) identify any trends in the monitoring data over the life of the development; (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (f) describe what measures will be implemented over the next year to improve the environmental performance of the development. 	The following Compliance Reports have been developed as follows: <ul style="list-style-type: none"> • Report 1 dated 27 April 2021 (actioned within 3-months of commencement of remediation) • Report 2 dated 30 April 2022 • Report 3 dated 28 April 2023 • Report 4 dated 30 April 2024 Sighted DPHI response to Report No. 4 ref: SSD-6666-PA-30 dated 3 October 2024 Reports include: <ul style="list-style-type: none"> (a) Section 4 Trends in monitoring data per aspect e.g., 4.3.2 for noise and vibration (b) Section 4, e.g., 4.8.3 Actual versus predicted impacts for Waste (c) Section 5. Not required to be referred to. Not many actions required at this stage; long term management only. 	HAKK-02-OFI-04: Within the Compliance Table A-1, against Condition C11, incorrect references have been allocated to address C11 (a)-(c). It is recommended to update the references within the Compliance Table to clearly state how compliance has been addressed.	Compliant
4.12	C	C12	The Applicant must make each Compliance Report publicly available no later than 60 days after submitting it to the Planning Secretary and notify the Planning Secretary in writing at least 7 days before this is done.	Compliance Reports 1 to 4 were verified to be publicly available on the project website. DPHI response to Report No. 4 ref: SSD-6666-PA-30 dated 3 October 2024 notes that a copy of the 2023/2024 Compliance Report is already publicly available on the company website.		Compliant
4.13	C	C13	Independent Audit Within one year of the commencement of remediation works, and every three years thereafter, unless the Planning Secretary directs	Previous audit was conducted 30 November and 1 & 2 December 2021, within one year of commencement of remediation works (27 January 2021).		Compliant

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			<p>otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (Audit) of the development. Audits must:</p> <ul style="list-style-type: none"> (d) be prepared in accordance with the Independent Audit Post Approval Requirements (Department 2020); (e) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; and (f) be submitted to the satisfaction of the Planning Secretary within three months of commissioning the Audit (or within another timeframe agreed by the Planning Secretary). 	<p>This is the second audit of the project which has been actioned within 3-years of the previous audit, conducted on 26-27 November 2024.</p> <ul style="list-style-type: none"> (a) the audit report has been prepared in accordance with the IAPAR 2020 guidelines and is peer reviewed to ensure consistency with these requirements. (b) Approval of lead auditor from DPHI as per letter dated 19 November 2024, ref: SSD-6666-PA-32. (c) Previous audit report was submitted as per letter from Ramboll on behalf of Hydro to DPHI dated 14 January 2022. 		
4.14	C	C14	<p>In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department, 2020), the Applicant must:</p> <ul style="list-style-type: none"> (a) review and respond to each Independent Audit Report prepared under Condition C13 of this consent; (b) submit the response to the Planning Secretary and any other NSW agency that requests it, together with a timetable for the implementation of the recommendations; (c) implement the recommendations to the satisfaction of the Planning Secretary; and (d) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary and notify the Planning Secretary in writing at least 7 days before this is done. 	<p>As per previous Independent Audit:</p> <ul style="list-style-type: none"> (a) Review and response actioned 23 December 2021 from Hydro to AQUAS (b) Audit report submitted as per letter from Ramboll on behalf of Hydro to DPHI dated 14 January 2022. (c) No recommendations were required for action as a result of the previous audit. (d) The Independent Audit Report and response was noted to be made available on the project website with notification contained within the letter dated 14 January 2022 as per "Public availability of Audit Report and response", advising that the report and response will be made available following the 21 January 2022. 		Compliant
4.15	C	C15	<p>Monitoring and Environmental Audits</p> <p>Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident</p>	<p>Dust, groundwater, and waste monitoring results displayed on website up to 2023.</p> <p>Compliance reports now cover the monitoring requirements. Four compliance reports have been actioned:</p> <ul style="list-style-type: none"> • Hydro Compliance Report 1 – 27 April 2021 • Hydro Compliance Report 2 – 30 April 2022 		Compliant

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			notification, reporting and response, non-compliance notification, compliance reporting and independent auditing. Note: For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.	<ul style="list-style-type: none"> Hydro Compliance Report 3 – 28 April 2023 Hydro Compliance Report 4 – 30 April 2024 <p>This is the second environmental audit on the project within 3-years of the previous audit.</p>		
	C		ACCESS TO INFORMATION			
4.16	C	C16	<p>At least 48 hours before the commencement of remediation works until the completion of all works under this consent, the Applicant must:</p> <p>(a) make the following information and documents (as they are obtained or approved) publicly available on its website:</p> <ul style="list-style-type: none"> (i) the documents referred to in Condition A2 of this consent; (ii) all current statutory approvals for the development; (iii) all approved strategies, plans and programs required under the conditions of this consent; (iv) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; (v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; (vi) a summary of the current stage and progress of the development; (vii) contact details to enquire about the development or to make a complaint; (viii) a complaints register, updated monthly; (ix) the Compliance Report of the development; (x) audit reports prepared as part of any Independent Audit of the development and the Applicant's 	<p>Website still in place: https://regrowthkurrikurri.com.au/</p> <p>(a) the following were verified to be publicly available:</p> <ul style="list-style-type: none"> (i) EIS, Response to Submissions Determination (includes SSD notice of decision, assessment report, Mod-1, consolidated consent). (ii) Environmental Management Plans (RWEMP, CCMP, SAP, TMP, AQMP, NVMP, SWMP, WMP, EEP, BMP, AHMP, SEP, WHSMP, PIERMP) (iii) DDG Reports for 2021, 2022 and 2023; Annual Groundwater Monitoring Reports 2018-2023; Annual Waste Monitoring Reports 2018-2023. (iv) As per monitoring reports above. (v) Media/News tab (vi) Contact tab – community.kurri@hydro.com (vii) Complaints register as at October 2024 (viii) Compliance Reports 1-4 (ix) Independent Environmental Audit Report December 2021 + Hydro Response 		Compliant

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			response to the recommendations in any audit report; (xi) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary.	(xi) No additional matters required. (b) Information was verified as current and up to date.		
5	APPX	3	APPLICANT'S MANAGEMENT AND MITIGATION MEASURES			
	APPX	3	SITE ESTABLISHMENT			
5.1	APPX	3.1	General <ul style="list-style-type: none"> All Works personnel would be informed during the site induction of their obligations to minimise environmental impacts and the need to take reasonable and practical measures to minimise impacts. The Stakeholder Engagement Plan (as discussed in Section 8.1.4 of the EIS) would continue to be implemented to engage with government agencies, Cessnock and Maitland City Councils, landowners, community members and other stakeholders to provide a single consultation framework. The Stakeholder Engagement Plan would define the method and persons responsible for the dissemination of information regarding the Project. This would include the procedure for receiving and responding to comment or complaints from the community. Local residents would be notified in advance of the Project of the nature and estimated timescales for completion of the Project. Thereafter ongoing notifications and updates on new or changes to Works activities would be provided in accordance with the Stakeholder Engagement Plan. A 24-hour telephone number would be provided as a contact point for any complaints, issues or general enquiries regarding the Project. 	Condition as applicable during the construction phase of remediation. Daracon induction was in place as reviewed. Hydro Aluminium Site Remediation Works – WHS & Enviro. Includes the following topics: <ul style="list-style-type: none"> Hazards & Control Measures Relevant to Site Storage & Handling of Hazardous Chemicals & Dangerous Goods Emergency Response Management Incident Management & Reporting Reporting all Environmental Incidents Vehicle Site Access Requirements Site Requirements – Vehicles Mandatory PPE Remedial Works Environmental Management Plan (RWEMP) Project Environmental Aspects, Constraints & Key Risks Environmental Considerations Soil & Water Management (Erosion & Sediment Control) Biodiversity Management – Flora and Fauna Air Quality Management (Dust & Odour) Waste & Resource Recovery Management Summary of Environmental Requirements 		Compliant

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				<ul style="list-style-type: none"> A Key Risk on this Project is Adverse Community Impacts <p>Following induction, personnel would need to take a quiz – HAKK Site Induction Quiz (Form No. IM-FOR-0203-001, Rev 02), e.g., Q12 – <i>What must you do if you find what appears to be an Aboriginal or Cultural artefact?</i></p> <p>Inductions were recorded on the Induction and Training Register e.g., No. 295 employee from Enviro Pacific inducted 14 February 2022 + No 511 from Enviro Pacific inducted 6 March 2023 with Asbestos Removal and Asbestos Awareness Training noted. Last inductee noted as No. 740 from Civil Movement inducted on 18 July 2024.</p> <p>Stakeholder Engagement Plan implemented with the Community Reference Group established and meetings minuted until 2023. Last meeting held November 2023 (meeting No. 56) and attended by Hydro, GHD, Maitland City Council, Cessnock City Council, and community representatives.</p> <p>The Stakeholder and Community Engagement and Notification Plan developed by GHD ref 22/18982, June 2021 is unchanged and was verified during the previous audit. Two complaints were received during the audit period as follows: No. 2 on 28 March 2023 via UGL environment officer working on the Hunter Power Project. Workers complained about dust coming from the 7A furnace building where waste was being loaded into dump trucks. Inspection undertaken; water cart wetted down waste with no further dust observed. Complaint closed. Noted that updated 1 May 2023.</p> <p>No. 3 on 8 July 2023 via UGL environment officer working on the Hunter Power Project. Workers complained about dust coming from containment cell between 9-10am, assumed to be gypsum due to its nature and location. Works were occurring on the weekend, however no waste material was being placed and a water cart did wet down the area afterwards (10:55am), however dust was present again around</p>		

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				<p>1pm. Requested that contractor check weather forecast on weekends and RDOs and have water carts on standby if high winds predicted. Complaint closed.</p> <p>A contact number and email address remain on the project website.</p>		
5.2	APPX	3.2	Air Quality <ul style="list-style-type: none"> Establish four dust deposition monitoring locations around the Project Site. Where practicable the monitoring locations would be established a minimum of three months prior to the Project to establish baseline conditions. 	Dust Deposition Gauges (DDGs) were positioned onsite at 5 locations from December 2016, six months prior to commencement of demolition and remained in place during remediation works. Monitoring ceased November 2023, with the last monitoring event taken on 30 October 2023. Two exceedances were recorded February 2020 and December 2021 due to bushfires.		Compliant
5.3	APPX	3.3	Soil and Water <ul style="list-style-type: none"> Erosion and sediment controls would be installed prior to the commencement of the Works. This would include installation of geotextile fabric downstream of Works areas. These controls would continue to be managed and maintained throughout the Works. Undertake any required additional maintenance of the existing surface water drainage and dams prior to commencing the Works. 	<p>An Erosion and Sediment Control Plan (ESCP) was developed as part of the RWEMP.</p> <p>Where trucks drove into the cell area, reinforced culverts were originally removed, and perimeter drainage installed (drains into two swales). Geotextile inlet side, gravel installed and geofabric followed by topsoil.</p> <p>However, no additional maintenance required.</p> <p>Remediation is now complete with erosion and sediment controls now removed aside from at the Containment Cell area (in place until landscaped areas are fully established).</p> <p>Existing drainage included as part of inspections e.g., culvert at Unamed Creek No. 1. Culvert also at Containment Cell (refer to photos).</p>		Compliant
5.4	APPX	3.4	Traffic and Access <ul style="list-style-type: none"> In consultation with Cessnock City Council and Roads and Maritime, general signposting of the demolition vehicle routes with appropriate heavy vehicle and construction warning signs. Review of speed restrictions along Hart Road and additional signposting of speed limitations. 	<p>As per Traffic Management Plan Rev 0 ref AS130415 23 December 2020 and reviewed during the previous audit:</p> <ul style="list-style-type: none"> Table 3-2 Consultation with Cessnock City Council and Roads and Maritime Services regarding general signposting of the demolition vehicle routes with appropriate heavy vehicle and construction warning signs. The TMP 		Compliant

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			<ul style="list-style-type: none"> Installation of specific warning signs at Dickson Road to warn existing road users of entering and exiting demolition traffic. The initial internal access restrictions and alternative access routes would be established for the initial Works phase. 	<p>submitted to Council and RMS for review and comment. TMP to be finalised to address feedback (as appropriate) from Council and RMS.</p> <ul style="list-style-type: none"> 20km speed limit for Hart Rd, 12km at HAKK site entrance. Table 3-2 Installation of specific warning signs at Dickson Road to warn public road users of entering and exiting heavy vehicle Demolition traffic. A Traffic Control Plan is to be prepared in consultation with Council. This is not yet triggered. Figure 2-1 Haulage Traffic Routes: Access is presented in site induction and provided to relevant personnel / truck operators not subject to induction. 		
5.5	APPX	3.5	Aboriginal Heritage <ul style="list-style-type: none"> Precautionary fencing of Hydro-IA35-15 prior to surface collection. Surface collection and relocation of newly identified isolated artefact Hydro-IA35-15. 	The located artefact was relocated to Mindaribba Local Aboriginal Land Council as per AHIMS dated 17 April 2021 (verified during the previous audit).		Compliant
5.6	APPX	3.6	Biodiversity <ul style="list-style-type: none"> The Project Site boundary would be clearly delineated to limit the extent of vegetation clearance to that described in this EIS, and to restrict access during the Works. This would include erection of security fencing around the Containment Cell and maintaining the security fencing around the Smelter Site. Pre-clearing surveys would be undertaken by an appropriately qualified ecologist prior to vegetation clearance. Where required (such as the felling of hollow bearing trees) vegetation clearance would be supervised by an appropriately qualified ecologist or animal handler. 	<ul style="list-style-type: none"> As verified during the previous audit. Project site boundary now removed with permanent fencing installed at Containment Cell. Security fencing in place at Containment Cell as sighted during inspection. Refer to photos. As per previously reviewed GHD ecologist report dated 24 February 2021 for Clearance Works. No ecologist inspections required during audit period. No clearing required during audit period. All clearing complete. 		Compliant
5.7	APPX	3.7	Waste	No storage of material on site with sheds now emptied. Stockpiles and sheds were included during weekly inspections by both Daracon and Hydro.		Compliant

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			<ul style="list-style-type: none"> The designated storage and stockpile areas would be established, including the installation of the environmental controls described in Section 8.2.1 of the EIS. 			
	APPX	3	THE WORKS			
5.8	APPX	3.8	General <ul style="list-style-type: none"> 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. 	<p>Water Treatment Plant Management Plan HAKK Temporary Water Treatment Plant (TWTP), Document Number 105079-Q-1000, Rev B2 dated 12 December 2021 (developed by Enviro Pacific Services).</p> <p>Section 4.2 Ongoing Operation & Maintenance – Enviro Pacific would have trained operators to regular service and maintain the system for the following activities:</p> <ul style="list-style-type: none"> Normal operation of the batch treatment process Safety & Quality documentation Optimisation of the overall system performance & adapting to site requirements Inspection and servicing of pumps and equipment Probe cleaning and calibration Clarifier and LDAF cleaning Monitoring, procuring and pump out of chemicals and consumables Sample collection and freighting to lab for analysis Daily/weekly/monthly performance recording and reporting Remote monitoring Emergency attendance and troubleshooting <p>Maintenance – filtration media replaced once during the works. Payment claim from Daracon which will include the works.</p> <p>Email dated 24 May 2024 ref 1640 HAKK – TWTP Filter Media Classification and Geo bag material Results. Early on for removal of waste – sludge went to</p>		Compliant

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				<p>geobag for disposal. Originally capped under Containment Cell.</p> <p>May 2023 Claim No. 36 Leachate prevention and treatment – 849kl. Removal of GAC.</p> <p>13 September 2023 EPS EPGAC filter media email from Daracon, 2 June 2023 – checking media depletion.</p> <p>19 May 2023 email WTP Exhausted Media – from 001 to 005 (drinking water standard). Batch 28 and 29 failures due to media exhausted. 3 media to replace. EPS removed via vac truck and put into Containment Cell at the time. Remaining to be filtered into sediment pond. Used media removed off site as well.</p> <p>At the time of the audit, the TWTP had already been decommissioned.</p>		
5.9	APPX	3.9	Air Quality <ul style="list-style-type: none"> Accumulated fines from within the buildings would be removed where safe, reasonable and feasible to do so prior to building demolition. Dust suppression to be applied during induced collapse of buildings or structures. Watering of the demolition areas and unsealed access roads. Vehicles would use wherever practicable existing sealed roads. A speed limit of 20km/hr would be imposed on internal roads. Where possible construction vehicles and machinery would be turned off or throttled down when not in use. Construction vehicles and machinery would be maintained in accordance with manufacturer's requirements. The erosion and sediment control measures described in Section 13.4 of the EIS would assist in controlling dust generation. 	<p>The Air Quality Management Plan (AQMP) Rev 0, ref 318000533 dated 23 December 2020 is unchanged.</p> <p>Dust Deposition Gauges (DDGs) were positioned onsite at 5 locations from December 2016, six months prior to commencement of demolition and remained in place during remediation works. Monitoring ceased November 2023, with the last monitoring event taken on 30 October 2023. Two exceedances were recorded February 2020 and December 2021 due to bushfires.</p> <p>Two complaints were received during the audit period as follows:</p> <p>No. 2 on 28 March 2023 via UGL environment officer working on the Hunter Power Project. Workers complained about dust coming from the 7A furnace building where waste was being loaded into dump trucks. Inspection undertaken; water cart wetted down waste with no further dust observed. Complaint closed. Noted that updated 1 May 2023.</p>		Compliant

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			<ul style="list-style-type: none"> Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. Record any exceptional incidents that cause dust and/or air emissions, either on or offsite, and the action taken to resolve the situation in the log book. Carry out regular site inspections to monitor compliance with the AQMP, record inspection results, and make an inspection log available to the EPA and/or Cessnock City Council when asked. Keep site fencing, barriers and scaffolding clean using wet methods. Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction. Provide and maintain an adequate water supply on the Project Site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate. Use enclosed chutes and conveyors and covered skips where possible and appropriate. Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate. Vehicles entering and leaving the Project Site would be covered to prevent escape of materials during transport. Haul routes would be inspected for integrity and, where required, instigate necessary repairs to the surface as soon as reasonably practicable. All vehicles transporting gypsum on public roads would have covered loads. The gypsum would be unloaded and stored within an enclosed shed. The shed was originally constructed for the storage of spent pot lining and therefore designed to minimise dust leaving the shed. A small daily quantity would be stockpiled at the gypsum application station. Where required due to weather conditions (such as wind) the amount would be reduced and more regularly transported from the stockpile within the shed. 	<p>No. 3 on 8 July 2023 via UGL environment officer working on the Hunter Power Project. Workers complained about dust coming from containment cell between 9-10am, assumed to be gypsum due to its nature and location. Works were occurring on the weekend, however no waste material was being placed and a water cart did wet down the area afterwards (10:55am), however dust was present again around 1pm. Requested that contractor check weather forecast on weekends and RDOs and have water carts on standby if high winds predicted. Complaint closed.</p> <p>Gypsum stored in 2022, used in 2023. Spraying of trucks actioned when placing gypsum.</p> <p>31 July 2023 moving from capped waste stockpile and 29 July 2024 by Hydro. Trees cleared at Roller Park – checked for bird nests and hollows.</p> <p>Close out of actions occurred during meetings; regular catch ups with PM from Daracon. Otherwise during inspections or when present on site.</p>		

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			<ul style="list-style-type: none"> The Capped Waste Stockpile material is expected to have some inherent moisture. If required due to climatic conditions the material (including the placed gypsum) would be subjected to mist spraying to suppress dust generation. Load levels would not exceed the height of the truck, reducing the material's potential wind and draft exposure. Mist spraying facilities would be available at the Containment Cell if required due to climatic conditions to suppress dust generation. 			
5.10	APPX	3.10	Noise and Vibration <ul style="list-style-type: none"> Truck drivers are to be informed of site access routes, acceptable delivery hours and must minimise extended periods of engine idling. Demolition vehicles and machinery would be selected with consideration of noise emissions. Where possible the sound power level of equipment and plant would comply with the sound power levels listed in the Noise and Vibration Impact Assessment in Appendix 7 or it should be replaced with less noise intensive equipment. Activities that would generate an audible noise at sensitive receivers would be limited to occur between 7:00 am to 6:00 pm Mondays to Fridays and 7:00 am to 1:00 pm on Saturdays. Activities outside these standard hours would be undertaken with the equipment restrictions described in the Noise and Vibration Impact Assessment in Appendix 7. Machines found to produce excessive noise compared to typical noise levels should be removed and replaced, or repaired or modified prior to recommencing works. Where possible construction vehicles and machinery would be turned off or throttled down when not in use. Equipment would be inspected and maintained in accordance with manufacturer's requirements. Use less noise-intensive equipment where reasonable and feasible. 	<p>Noise and Vibration Management Plan Rev 0, ref 318000533, 23 December 2020 is unchanged, however the noise and vibration impact is now redundant with the site fully remediated.</p> <p>OOHW – SMEC attended under CQA role, filling sump with drainage aggregate with Moxy delivering could potentially cause noise. Daracon undertook monitoring 14 February 2022 on the first night shift. Basin Lining Noise Monitoring Report 18 February 2022 at 3 x locations as per Noise Monitoring Report by Daracon:</p> <ol style="list-style-type: none"> Horton Road, Loxford Bishops Bridge Road, Loxford Dawes Road, Loxford <p>Three exceedances were noted; however, it was determined that these were not due to the works and was a result of highway traffic noise, birdlife, frogs and cicadas. Equipment used: 01db METRAVIB smart noise monitor, Class 1, Serial No. 12641, Calibrated 3 March 2021 (next due March 2022).</p> <p>Out of standard hours works were undertaken from 20 November 2023 to 23 February 2024. Ramboll on behalf of Hydro submitted a letter on 14 November 2023 notifying the Department of the proposed out of standard hours works "SSD 6666 Hydro Remediation Project: Notification of Out of Hours Works" – proposed night time works for the installation of the Containment Cell capping liners occurring from late November 2023 to</p>		Compliant

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			<ul style="list-style-type: none"> Construction equipment with the most effective mufflers, enclosures and low-noise tool bits and blades must be procured and utilised where practicable for the Project. Where possible mains power should be utilised for temporary traffic signals / work area lighting. Where this is not feasible silenced generator sets are to be used instead. Avoid unnecessary revving of engines and turn off plant that is not being used / required where practicable. Use only non-tonal reverse alarms (broadband alternatives are needed). Where possible organise the site so that delivery trucks and haulage trucks only drive forward to avoid the use of reversing alarms. Where practical fixed plant should be positioned as far away as possible from sensitive receivers. Upon receiving a noise complaint regarding demolition activities, the following steps would be undertaken: <ul style="list-style-type: none"> The person nominated in the Stakeholder Engagement Plan would investigate the source of the complaint. The aim would be to initiate an investigation no later than two hours after the complaint has been made (dependent on the nature of the complaint). Where practicable a visit would be made to the complainant to verify the nature of the complaint. Where justified, appropriate action would be taken to amend the activity causing the complaint. Where three or more substantiated complaints of a similar nature are received (from at least two complainants), the work element must be reviewed in order to consider whether the work methods can be changed or if additional mitigation methods can be employed in order to prevent or reduce the likelihood of further complaints being made. Attended monitoring should also be undertaken in response to substantiated complaints in order to validate and assess the source(s) giving rise to complaint(s). Attended monitoring would be undertaken every three months to assess compliance with the relevant noise limits. 	<p>February 2024 (breaking from 22 December 2023 to 7 January 2024 inclusive). Shifts proposed:</p> <ul style="list-style-type: none"> Monday 6:00pm to Tuesday 7:00am Tuesday 6:00pm to Wednesday 7:00am Wednesday 6:00pm to Thursday 7:00am Thursday 6:00pm to Friday 7:00am Friday 6:00pm to Saturday 7:00am <p>Requested for the cell lining material which is black and extra absorbent with night time allowing the liner installation to cool – for safety reasons and for the quality and integrity of the process. Use of plant noted within letter. Submitted as per portal receipt reference SSD-6666-PA-27. Works noted to be inaudible at the nearest sensitive receiver as per B35(a).</p> <p>No noise complaints received to date.</p>		

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5.11	APPX	3.11	Soil and Water <ul style="list-style-type: none"> Erosion and sediment controls would be inspected and maintained as required on a weekly basis and after a rain event. The surface water drainage system would be inspected and maintained as required on a monthly basis. Vehicles exiting the Project Site onto public roads would be inspected for mud and dirt. If required vehicles would be manually cleaned prior to exiting the Smelter. Vehicle refuelling would be undertaken using mobile refuelling vehicles equipped with spill containment equipment and a spill kit. All chemicals on-site would be stored in accordance with the applicable Safety Data Sheet. An appropriate spill kit is to be on-site at all times and any spillage is to be immediately cleaned up. In the event of a large or hazardous spill, the fire brigade, police, ambulance and OEH would be contacted as required. The bulk gypsum would be unloaded and stored within an enclosed shed and protected from rainfall, and therefore avoiding the potential for erosion. The shed was originally constructed for the storage of spent pot lining and therefore designed to protect the stored material from water. A small daily quantity would be stockpiled at the gypsum application station within a bunded area. The material would be returned to the storage shed in the event of rain. The gypsum application station would be cleaned on a weekly basis. Cleaned material would be placed within a loaded truck for disposal within the Containment Cell. In the event that gypsum does get washed away by stormwater, the water would be collected within the Smelter water management system prior to reuse for dust control or discharged in accordance with the EPL. 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. 	<p>The Soil and Water Management Plan (SWMP) Rev 0 ref 318000533, 23 December 2020 is unchanged since the previous audit, however remediation works are now complete.</p> <p>Regular inspections of the site were actioned including erosion and sediment controls, vehicle cleansing, spill kits and hazardous chemicals.</p> <p>Gypsum was stored and unloaded within enclosed shed. No instances of stockpiled gypsum requiring relocation back to shed during rain. No instances of gypsum entering the stormwater system</p> <p>TWTP construction as designed, i.e. within a bunded area to manage leaks.</p> <p>As per Condition B19B, performance testing was undertaken by the TWTP operator, Enviro Pacific, for treated leachate quality prior to the commissioning of the TWTP. Three successful commissioning trials were undertaken with raw and treated leachate samples sent to a NATA accredited laboratory for analysis against performance requirements, including target values for fluoride, as outlined in the TWTP management plan. Through this testing Enviro Pacific evaluated options for further reduction of fluoride concentrations. The first production batch was released for discharge on 16 March 2023 following compliance with treatment criteria values. As of March 2024, there have been 59 batches successfully treated and discharged into the site stormwater system.</p> <p>Implementation as per inspections. No leaks noted e.g., at transfer pipe when transferring leachate to the pond at TWTP.</p> <p>No instances where tanks and storage dams were full requiring leachate water to be pumped into containment cell. No overflowing incidents.</p>	Site Observation OBS-01: Sandbags at the Containment Cell were in disrepair; however, it was confirmed that these were no longer required and will be removed.	Compliant

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			<ul style="list-style-type: none"> 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. 	<p>Daracon, Hydro, and Enviro Pacific were present onsite during operation of TWTP.</p> <p>Sighted email from Daracon to Enviro Pacific: "Demobilisation of TWTP – Notice to commence demobilisation – Wednesday 17th April 2024". Confirms no further leachate presented for treatment and that demobilisation can commence of the Water Treatment Plant. Prior to this, email sighted from Hydro to Daracon on 12 April 2024 stating that Daracon can inform Enviro Pacific that the TWTP can be demobilised with the LD03 leachate pond to also be decommissioned, and the liner sent to Central Waste Station.</p>		
5.12	APPX	3.12	Traffic and Access <ul style="list-style-type: none"> The promotion of carpooling for construction demolition staff and other shared transport initiatives. Management of the transportation of demolition materials/waste to maximise vehicle loads to therefore minimise vehicle movements. Regular consultation with the Kurri Kurri Speedway and the Kurri Kurri Junior Motorcycle Club would be undertaken to understand their planned activities and to advise of the proposed Project program. The initial internal access restrictions and alternative access routes would be altered as required to reflect the progression of the Works. A speed limit of 20km/hr would be imposed on internal roads. 	<p>Traffic Management Plan (TMP) Rev 0 ref AS130415, 23 December 2020 as previously evidenced.</p> <p>Dickson Rd South remediation – fortnightly meetings – notified Speedway for waste removal (near SPL sheds). 4 July 2023 Meeting No. 64, under Safety Section about Dickson Rd closure (Item 1.1).</p> <p>Consultation with Snowy – to inform waste being moved. Concerns about asbestos – discussed with Snowy, slides presented + email 26 April 2024 with attachment of Daracon toolbox and waste movement: CWS Waste Cartage Presentation – includes controls, vehicle movements, and use of wheel wash.</p> <p>Snowy Hydro now manage the main traffic management onsite.</p>		Compliant
5.13	APPX	3.13	Aboriginal Heritage <ul style="list-style-type: none"> Where possible, avoid the need to stockpile material in the area of high archaeological sensitivity. In the event that stockpiling in this area is required, geo-matting would be placed on the surface of the area prior to stockpiling. An unexpected finds procedure would be implemented in the event that a potential Aboriginal site was identified during the Works. This procedure would include: 	<p>Aboriginal Heritage Management Plan Rev 0, ref 318000533 dated 23 December 2020 notes one Aboriginal archaeological site (an isolated stone artefact, Hydro-IA35-15) had been identified. An area of high archaeological sensitivity was located within the northern section of the proposed Containment Cell material stockpile area which has been registered on the Aboriginal Heritage information System (AHIMS) as "Hydro PAD 1" with a Site ID of 17-6-3872. Section 2.2 identified potential Impact as follows: in the event this</p>		Compliant

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			<ol style="list-style-type: none"> 1) All works would cease immediately in the area to prevent any further impacts to the site. 2) Notify the Works' Environment Officer. 3) Engage a suitably qualified archaeologist and RAP representative to determine the nature, extent and significance of the Aboriginal site and provide appropriate management advice. Management action(s) would vary according to the type of evidence identified, its significance (both scientific and cultural) and the nature of potential impacts. <ul style="list-style-type: none"> • Prepare and submit an AHIMS site card for the Aboriginal site. A standard procedure would be implemented for the management of any potential human skeletal remains identified throughout the Works. This procedure would include: <ol style="list-style-type: none"> 1) All work in the vicinity of the remains should cease immediately. 2) The location should be cordoned off and the appropriate authorities notified. 3) A physical or forensic anthropologist should be commissioned to inspect the remains in situ and make a determination of ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or modern). Following completion of task three, the applicable action/s listed below would be implemented: <ul style="list-style-type: none"> - If the remains are identified as non-human, work can recommence immediately. - If the remains are identified as modern and human, the area would become a crime scene under the jurisdiction of the NSW Police. - If the remains are identified as pre-contact or historic Aboriginal, the site would be secured and OEH and all RAPs notified in writing. • Where impacts to exposed Aboriginal skeletal remains cannot be avoided, remains would be retrieved via controlled archaeological excavation and reburied outside of the Disturbance Boundary in a manner and location determined by RAPs. 	<p>area was used for stockpiling materials, physical impacts to the integrity of natural soil profiles within this area could occur as a result of sediment deposition and removal activities (including associated heavy vehicle movements). This could in turn impact on Aboriginal archaeological relics present in this area.</p> <p>Area now covered by fill – further investigations were actioned as elevated contaminants in the area. 1-2m of fill material – found aerial photo – archaeologist visited and confirmed a recent archaeological deposit. Report provided to clarify this. Submitted to the DPHI and updated as Mod-2.</p> <p>The one known item (stone tool for cutting animal hides) was relocated to Mindiribba River Land Council as evidenced during the previous audit.</p> <p>No unexpected finds during the audit period; no skeletal remains.</p>		

Hydro Aluminium Kurri Kurri Smelter Remediation

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			<ul style="list-style-type: none"> If the remains are identified as historic non-Aboriginal, the site would be secured and the NSW Heritage Branch contacted. 			
5.14	APPX	3.14	Non-Indigenous Heritage <ul style="list-style-type: none"> In the event that a potential heritage item is unearthed during construction works would cease and the Office of Environment and Heritage would be notified. Photographs and drawings (from construction, operation and demolition) of the Smelter would be made available to interested historical societies or community groups. Hydro would work with the community on how to recognise the history of the Smelter. 	<p>No unexpected finds to date.</p> <p>Photographs were provided to Cessnock Library.</p> <p>Community Reference Group (CRG) tab on website.</p> <p>Site History and Remembrance on website. Smelter video 1992.</p> <p>Mural on Hart Road – shows history of the site. Collaboration with CRG.</p>		Compliant
5.15	APPX	3.15	Biodiversity <ul style="list-style-type: none"> To minimise the potential for the spreading of weeds hygiene protocols, including vehicle wash-downs, would be implemented for machinery used in vegetation clearance. Appropriate shallow rooted native grass species would be used in the vegetation cover for the Containment Cell. Appropriate hybrid grass species (that cannot become weed issues in adjoining native vegetation) would be used in stabilising surfaces following completion of the Works. 	<p>Trial report as above by Daracon e.g., Containment Cell Revegetation Management Report No. 2 – October 2024 – works completed, weed spraying, maintenance.</p> <p>September 2024 – included methods, 6-month maintenance.</p> <p>Upcoming for November 2024.</p> <p>Daracon maintenance to continue until March 2025 when vegetation fully established.</p>		Compliant
5.16	APPX	3.16	Visual <ul style="list-style-type: none"> In recognition of the likely community interest in the demolition of the stacks, Hydro would consider establishing viewing areas, including suitable parking and traffic control. 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 	<ul style="list-style-type: none"> Demolition of the stacks has already occurred prior to the previous audit. Mobile lighting at TWTP powered off the generator. Lower level and not mounted. TWTP now removed. Coates hire – Metro lighting tower used – tax invoice 23227048 received 1 May 2024 for hire period 31 March 		Compliant

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			nuisance to surrounding properties or the public road network.	to 30 April 2024. No lighting complaints received to date.		
5.17	APPX	3.17	Energy Efficiency/Greenhouse Gas <ul style="list-style-type: none"> Implementation of the measures described in Section 8.5.4 and Section 8.8.1 of the EIS to minimise the exposure of the waste material to moisture during the stockpiling, transport and placement activities (to reduce the potential for generation of methane emissions). Use light emitting diode (LED) lighting in offices, contractor compounds and temporary site lighting. Energy efficient inverter split system units would be installed in contractor compounds where practical and timers set so that air conditioning systems are switched off after hours. Personnel would be instructed to turn off lights and office equipment when these are not in use such as before and after the working day. Modern and fuel-efficient vehicles and machinery would be used during the Works wherever possible. All vehicles would be maintained in accordance with manufacturer's requirements to maintain efficiency. The potential for use of biodiesel blend fuels in its vehicles and machinery would be investigated. Personnel would be encouraged during the site induction to travel to and from the Smelter by carpooling. 	<p>The Energy Efficiency Plan Rev 0, ref 318000533, 23 December 2020 is unchanged since the previous audit. Table 3-2 Energy Efficiency Management Measures includes the following:</p> <ul style="list-style-type: none"> Minimise the exposure of the waste material to moisture during the stockpiling, transport and placement activities to reduce the potential for generation of methane emissions. Implementation of the measures described in the Soil and Water Management Plan (Rev 0, ref 318000533, 23 December 2020). However, remediation works are now complete. Run on generators. 5-6 lighting towers used for capping CC and night shift. Traffic control was in place full time and operating boom gates. Priority given to Daracon as moving waste. Stopped Snowy and UGL during movements. Back charged Snowy for the costs. Invoiced for lighting hire in April 2024. LED lighting more applicable when in operation. Refurbishment of office currently occurring. Energy efficient inverter split system units will be installed in contractor compounds where practical and timers set so that air conditioning systems are switched off after hours, prior to and during activities. Contractor compound now removed. Personnel will be instructed to turn off lights and office equipment when these are not in use such as before and after the working day, prior to and during activities. Still in practice for Hydro personnel onsite at pre-existing building. Modern and fuel-efficient vehicles and machinery were considered wherever 		Compliant

Hydro Aluminium Kurri Kurri Smelter Remediation

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				<p>possible. Equipment inspected and maintained in accordance with manufacturer's requirements. Refer to plant maintenance records.</p> <ul style="list-style-type: none"> The potential for use of biodiesel blend fuels in its vehicles and machinery was investigated, however not viable. Personnel were encouraged during the site induction to travel to and from the Smelter by carpooling. 		
5.18	APPX	3.18	Waste <ul style="list-style-type: none"> Promotion of efficient resource use, waste avoidance and waste minimisation. Compounds and the stockpile area would be maintained in an organised condition, with waste materials to be transported to and stockpiled in the designated storage area. Wastes would be managed to minimise the potential for windblown wastes spreading within or beyond the Project Site, including into watercourses. Implementation of the materials tracking system described in Section 8.5.5, Section 8.6 and Section 8.7.6 of the EIS. Where possible recyclable wastes generated at the contractor's compound (paper, cans and bottles) would be collected by a recycling contractor. Remaining wastes would be collected for disposal at a licensed waste management facility. Trucks transporting recyclable demolition materials from the Project site on public roads would be covered. Waste removal contractors transporting material from the Project Site would be required to provide dockets to confirm that waste was transported to a licensed waste management facility. The environmental controls and containment measures placed on waste stockpiles would be inspected and maintained as required on a weekly basis and after rain and strong wind events. 	<p>Current status of waste: all capped, all removed. Only offsite removal was for the filter media and geobag.</p> <p>Dam liners were taken to Central Waste Station (recycling facility) instead of being capped or taken to landfill. Sampling of dockets sighted as follows:</p> <ul style="list-style-type: none"> Docket No. 174875, 1 December 2023 (1.30T) Docket No. 175022, 4 December 2023 (0.62T) Docket No. 175375, 7 December 2023 (0.76T) Docket No. 175520, 8 December 2023 (1.56T) Docket No. 175544, 8 December 2023 (1.12T) Docket No. 177951, 15 January 2024 (2.06T) Docket No. 177999, 15 January 2024 (1.12T) <p>Waste Classification Report dated 14 May 2024 by Enviro Pacific for TWTP waste material. Section 2.4 Waste Classification – classification confirmed as restricted solid waste (RSW) and removed to Kemps Creek. Sighted: Cleanaway Docket No. KEM130182339.0 dated 30 May 2024.</p> <p>Final geotube removed as per Cleanaway Docket No. KEM130187066.0 dated 27 June 2024 (restricted waste).</p> <p>Daracon and Eco Line waste – lining a cell, cutting required – bins from JR Richards – skips removed as GSW – JR Richards Report sighted for the period of September 2021 to 31 August 2024.</p>		Compliant

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			<ul style="list-style-type: none"> 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 of 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. 			
5.19	APPX	3.19	Human Health <ul style="list-style-type: none"> Appropriate personal protective equipment would be provided to workers who are undertaking activities in or near the Capped Waste Stockpile. The equipment would remove exposure pathways relating to dermal exposure, incidental ingestion and inhalation. This would include: <ul style="list-style-type: none"> Waterproof boots, pants and long sleeved shirt as a minimum. Face shields would be required for personnel working in close proximity to exposed groundwater (when in locations and situations where splashing could result in incidental ingestion of groundwater and/or eye and skin contact). Appropriate masks would be required to prevent dust (including asbestos) inhalation. A respirator appropriate for ammonia, methane, hydrogen, hydrogen cyanide and hydrogen sulfide (available and ready to be used for all workers at the Capped Waste Stockpile). Real-time ambient air monitoring would be undertaken at several locations around the Capped Waste Stockpile 	<p>Works Capped Waste Stockpile – full asbestos PPE had to be worn – P3 respirator, filter for gases, coveralls, nitro gloves and booties. Decontamination unit was in place – steps were to remove PPE, bag, first showering, leave mask on, remove PPE, rinse mask, remove mask, wipe it down with alcohol wipe. Process as managed by Enviro Pacific.</p> <p>Hydro engaged Humanomics to undertake medicals on personnel before and after working in the area. Daracon undertook a similar process.</p> <p>PPE measures included in the training induction – Asbestos Removal Control Plan developed by EPS. Induction developed for Daracon. 1640-WMS-13 Work Method Statement 13, 11 January 2023 Rev 06.</p> <p>Asbestos Awareness Presentation delivered by Enviro Pacific. Air Monitoring as per above for asbestos. Described in Safety Plan and Enviro Pacific Plan ARCP. Figure 9 presented: “Capped Waste Stockpile Preparation Works”. Shows locations of asbestos air monitors, asbestos work area, asbestos decontamination unit, gypsum loading area, and gas monitoring location.</p>		Compliant

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			<p>when waste from the Capped Waste Stockpile is exposed. At a minimum, the ambient air would be monitored for concentrations of ammonia and hydrogen cyanide gases, and airborne asbestos fibres.</p> <ul style="list-style-type: none"> Real-time ambient air monitoring would be undertaken inside machinery housings, and workers within these housings would also have appropriate respirators available. Personnel involved in the handling of the gypsum would be required to wear the applicable personal protective equipment. 	<p>Gas monitoring and personal monitoring undertaken during Capped Waste Stockpile works, not required for Containment Cell as risk minimal for exposure. Gas monitoring as part of Validation Report requirements. Figure 9 Appx 1 – results of the monitoring. During movement of waste for ammonia and hydrogen cyanide gases. Gas monitors hired from Hazmat Services to monitor for ammonia and hydrogen cyanide near the CWS and main haul road to the ECC. Low levels recorded over the 5 rounds of monitoring.</p> <p>Section 8.8 monitoring static gas monitors managed by Hazmat Services completed 24 March to 26 April 2023. Readings above 0 were not identified. Nothing detected along haul road.</p> <p>Ammonia (not hydrogen cyanide) detected in the cabin of the bulldozer that was pushing the waste to the excavator at the CWS during waste removal. There were a few high readings at the containment cell as well for the dozer and the landfill compactor. The remedy was to move the machine away to a different area and allow the gas to dissipate before resuming work.</p> <p>The three static monitors along the haul road did not really detect anything. Location map sighted (dated 24 July 2023).</p> <p>No specific PPE for gypsum – standard PPE and P2 mask. Hydro was present during gypsum deliveries into allocated storage shed.</p>		
	APPX	3	CONTAINMENT CELL MANAGEMENT			
5.20	APPX	3.20	Visual <ul style="list-style-type: none"> The Containment Cell vegetation cover would be maintained (as described in Section 9.1.2 of the EIS). 	Cover crop appeared in good condition during site inspection. Regular inspections occurring of the Containment Cell.		Compliant
5.21	APPX	3.21	Air Quality <ul style="list-style-type: none"> As discussed in Section 9.1.1.3 of the EIS gas monitoring would be completed from the gas monitoring vents on a quarterly basis, until results indicate that gas 	Quarterly monitoring was undertaken – as per meeting minutes sighted, dated 19 November 2024. Gas Monitoring section shows zero ammonia but some methane. Monitored on the 12/02/2024, 22/05/2024, 15/08/2024. No triggers to date. Containment Cell LTMP		Compliant

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			<p>generation is not an issue. Gas monitoring would be completed for ammonia and methane.</p> <ul style="list-style-type: none"> In the event that gas concentration trigger levels outlined in the OEMP are exceeded, appropriate contingency responses would be implemented. 	<p>and Gas Monitoring Plan includes a procedure detailing contingency measures Table 4-2.</p> <p>Ramboll ECC Central Vent Gas Monitoring No. 318000344-002, 14 June 2024 – gas monitoring memo confirms the following: Gas monitoring was completed on 22 May 2024 using a MultiRAE Lite Portable multi-gas detector, calibrated to detect Ammonia (NH3) and Methane LEL, serial Number M01C014831. The following fieldwork was completed:</p> <ul style="list-style-type: none"> Gas meter calibrated with fresh air prior to taking reading Black plastic sheeting used to prevent water ingress to central vent pierced Ammonia and Methane LEL measured from central gas vent under confined conditions Black plastic sheeting cut open and allowed to vent for 10 minutes Ammonia and Methane LEL measured under open conditions Black plastic sheeting taped up with duct tape to re-seal the central gas vent <p>Conclusion: Ammonia levels are often reported in parts per million (PPM). The highest recorded result for ammonia translates to 0% of the lower explosive limits (LEL). These results indicate that the concentration of ammonia gas found at the ECC is below the LEL.</p>		
6	APPX	4	INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS			
	APPX	4	WRITTEN INCIDENT NOTIFICATION REQUIREMENTS			
6.1	APPX	4.1	<p>A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under Condition C7 or, having given such notification, subsequently forms the view that an incident has not occurred.</p>	No notifiable incidents to date.		Not Triggered

Hydro Aluminium Kurri Kurri Smelter Remediation

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6.2	APPX	4.2	<p>Written notification of an incident must:</p> <ul style="list-style-type: none"> (a) identify the development and application number; (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); (c) identify how the incident was detected; (d) identify when the applicant became aware of the incident; (e) identify any actual or potential non-compliance with conditions of consent; (f) describe what immediate steps were taken in relation to the incident; (g) identify further action(s) that will be taken in relation to the incident; and (h) identify a project contact for further communication regarding the incident. 	No notifiable incidents to date.		Not Triggered
	APPX	4	INCIDENT REPORT REQUIREMENTS			
6.3	APPX	4.3	<p>Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.</p>	No notifiable incidents to date.		Not Triggered
6.4	APPX	4.4	<p>The Incident Report must include:</p> <ul style="list-style-type: none"> (a) summary of the incident; (b) outcomes of an incident investigation, including identification of the cause of the incident; (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) details of any communication with other stakeholders regarding the incident. 	No notifiable incidents to date.		Not Triggered

Appendix F – Consultation

Re: Independent Environmental Audit - Hydro Aluminium Kurri Kurri Smelter Remediation (SSD-6666)**Joel Fleming** <joel.fleming@planning.nsw.gov.au>

To Barbara Pater

Cc staylor@ramboll.com; Leanne Pringle; Andrew Walker



Reply



Reply All



Forward



Wed 4/12/2024 5:02 PM

2. Important/Note

Follow up. Start by Wednesday, 4 December 2024. Due by Wednesday, 4 December 2024.

You replied to this message on 6/12/2024 9:59 AM.

If there are problems with how this message is displayed, click here to view it in a web browser.

EXTERNAL

Good afternoon Barbara,

Thank you for contacting the department for consultation on the independent audit of the Hydro Aluminium Kurri Kurri Smelter Remediation project (SSD-6666). We appreciate your thorough approach to this process.

As indicated by your previous email, I understand that the site inspection for this independent audit may have already taken place.

I have consulted with the Industry Assessments team and neither they nor the Compliance Branch have any comments for the audit at this time.

If you have any questions, please feel free to contact me.

Thank you.

Joel Fleming
Senior Compliance Officer

Development Assessment and Sustainability | Department of Planning, Housing and Infrastructure

T 02 6575 3416 | M 0467 715 429 | E joel.fleming@planning.nsw.gov.au

The Store, 6 Stewart Avenue, Newcastle West NSW 2302

www.dphi.nsw.gov.au*The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land.**We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.***From:** Barbara Pater <Barbara.Pater@app.com.au>**Sent:** Tuesday, November 19, 2024 5:07 PM**To:** DPE PSVC Compliance Mailbox <compliance@planning.nsw.gov.au>**Cc:** Shaun Taylor <staylor@ramboll.com>; Leanne Pringle <leanne.pringle@hydro.com>; Andrew Walker <Andrew.Walker@hydro.com>**Subject:** Independent Environmental Audit - Hydro Aluminium Kurri Kurri Smelter Remediation (SSD-6666)

Dear Sir/Madam,

I am writing to advise that The APP Group – HSEQ Systems and Auditing (APP) will be conducting the next Independent Environmental Audit of the Hydro Aluminium Kurri Kurri Smelter Remediation project as a requirement of Consent Conditions SSD-6666.

The audit is planned to be conducted on the 26-27 November 2024 and will review compliance in accordance with SSD-6666 Schedule 2: Parts A, B, C and appendices.

In line with the consultation requirements of the *Independent Audit Post Approval Requirements* (IAPAR 2020), Section 3.2, APP seeks your input into the scope of the audit and advice on any particular areas where you would like us to focus on.

Please also advise if you wish for any stakeholders to be contacted to obtain their input into the scope of this audit.

Regards,

Barbara Pater

Exemplar Global Lead Environmental Auditor | Consultant – HSEQ Systems and Auditing

**The APP Group**0415 764 785 | app.com.au

Gadigal Country | Level 14, 10 Spring Street, Sydney, NSW 2000



Appendix G – Audit Photos

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Road leading into the Containment Cell. Site has secured fencing with restricted access.



Former sediment basin at Containment Cell area now filled and grassed

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Temporary silt fencing in place until areas fully stabilised



Leachate system outlet

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Fauna fencing surrounding perimeter of Containment Cell area. No fauna encounters or incidents to date.



Double silt fencing around the perimeter of Containment Cell appeared in good condition.

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Channel leading from leachate outlet.



Perimeter road kept clean and clear

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Leachate holding tank. Area was clean with no sign of spills.



Area bunded with pit drain protection

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Rock placement and channel constructed to divert water into culvert



Perimeter road around Containment Cell appeared well maintained.

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Access path to gas vent. Coir logs in place as an additional measure to manage high flow areas.



Silt fencing also installed along fauna fencing with plans to soon remove as the permanent grass starts to come in.

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Dam onsite (known as the west surge pond) with pump for dewatering if required.



Dam water appeared clean and within capacity.

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Former site area. Daracon left site August 2024 with the area now cleared and grassed.



Former Temporary Water Treatment Plant site. Slab to remain.

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Site sheds now empty aside from four sheds being used by Tomago Aluminium for dross storage under their EPL.



Former Daracon site area.

Audit Photos – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



Former capped waste stockpile area. Material has now been fully removed and encapsulated.



Secondary dam (known as the east surge pond) alongside former capped waste stockpile area.

Site Observations – 26 November 2024: Hydro Aluminium Kurri Kurri Smelter Remediation



OBS-01: Sandbags at the Containment Cell were in disrepair; however, it was confirmed that these were no longer required and will be removed.



The APP Group

app.com.au