# **Development Consent**

# Section 4.38 of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning and Public Spaces under delegation executed on 9 March 2020, I approve the Development Application referred to in Schedule 1, subject to the conditions specified in Schedule 2.

These conditions are required to:

- prevent, minimise or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

Mike Young
Executive Director
Energy, Industry and Compliance

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Sydney 23 December 2020 File: OBJ/14/14437

## **SCHEDULE 1**

Application Number: SSD 6666

Applicant: Hydro Aluminium Kurri Kurri Pty Ltd

Consent Authority: Minister for Planning and Public Spaces

Site: Land as defined in Appendix 2 of this development consent

**Development:**Remediation of the former Hydro Kurri Kurri Aluminium Smelter site including:

- excavation of onsite contaminated areas
- excavation and treatment of Capped Waste Stockpile (CWS) material
- construction of a purpose-built containment cell
- placement of contaminated materials in the containment cell
- treatment of contaminated groundwater plume originating from the CWS
- ongoing management of the containment cell in perpetuity

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#### **DEFINITIONS**

Area of Environmental Concern Areas requiring surface soil and sediment remediation as identified by the reports titled *Phase 2 Environmental Site Assessment Kurri Kurri Aluminium Smelter* prepared by ENVIRON Australia Pty Ltd dated 1 November 2012 and *Phase 2 Environmental Site Assessments, Smelter Site, Additional Investigations* prepared by ENVIRON Australia Pty

Ltd dated 16 January 2015

Applicant Hydro Aluminium Kurri Kurri Pty Ltd, or any person carrying out any development to which

this consent applies

BC Act Biodiversity Conservation Act 2016 (NSW)

CCDDR Containment Cell Detailed Design Report prepared by GHD and dated August 2018

CLM Act Contaminated Land Management Act 1997 (NSW)
Conditions of Conditions contained in Schedule 2 of this consent

Conditions of this consent

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Containment Cell A 'dry entombment', engineered waste cell for the long-term storage of varied

contaminated wastes, located at the site of the former Clay Borrow Pit

Council Cessnock City Council
CWS Capped Waste Stockpile

Day The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and

Public Holidays

**Department** NSW Department of Planning, Industry and Environment

Development The development described in the EIS and Response to Submissions, including the

remediation works and the long-term management of the containment cell in perpetuity, as

modified by the conditions of this consent

Development layout

The plans at **Appendix 1** of this development consent

EIS The Environmental Impact Statement titled Former Hydro Kurri Kurri Aluminium Smelter

Demolition and Remediation Environmental Impact Statement prepared by Ramboll Environ dated 14 July 2016, submitted with the application for consent for the development, including any additional information provided by the Applicant in support of

the application

**ENM** Excavated Natural Material

**Environment** Includes all aspects of the surroundings of humans, whether affecting any human as an

individual or in his or her social groupings

**EPA** NSW Environment Protection Authority

EP&A Act Environmental Planning and Assessment Act 1979

EP&A Regulation Environmental Planning and Assessment Regulation 2000
EPL Environment Protection Licence under the POEO Act

**Evening** The period from 6 pm to 10 pm

Heritage Encompasses both Aboriginal and historic heritage including sites that predate European

settlement, and a shared history since European settlement

Heritage item An item as defined under the Heritage Act 1977, and assessed as being of local, State

and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the *National Parks and Wildlife Act 1974*′, the World Heritage List, or the National Heritage List or Commonwealth Heritage List under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), or anything identified as a heritage item

under the conditions of this consent

**H&P Group** Housing and Property Group of the Department

Incident An occurrence or set of circumstances that causes or threatens to cause material harm

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and which may or may not be or cause a non-compliance

Note: "material harm" is defined in this consent

Land Has the same meaning as the definition of the term in section 1.4 of the EP&A Act

LTEMP Long Term Environmental Management Plan

Material harm Is harm that:

 (a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or

(b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and

expenses that would be incurred in taking all reasonable and practicable measures to

prevent, mitigate or make good harm to the environment)

New South Wales Minister for Planning and Public Spaces (or delegate)

Mitigation Activities associated with reducing the impacts of the development prior to or during those

impacts occurring

Monitoring Any monitoring required under this consent must be undertaken in accordance with section

9.40 of the EP&A Act

Night The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays

and Public Holidays

Non-compliance An occurrence, set of circumstances or development that is a breach of this consent

**OEH** (former) NSW Office of Environment and Heritage (now Biodiversity and Conservation

Division of the Department)

Operation The long-term maintenance and monitoring of the site upon completion of remediation

Planning Secretary

**Minister** 

Planning Secretary as defined in section 1.4 of the EP&A Act, or nominee

POEO Act Protection of the Environment Operations Act 1997 (NSW)

**RAP** Remedial Action Plan prepared by Ramboll, dated 2 July 2018, Revision FINAL V4,

included in the RtS

Reasonable Means applying judgement in arriving at a decision, taking into account: mitigation benefits,

costs of mitigation versus benefits provided, community views, and the nature and extent

of potential improvements

Remediation Works

Includes the following activities, unless the context otherwise indicates:

site preparation

construction of the containment cell and associated infrastructure

remediation of soils within Areas of Environmental Concern and placement of contaminants in the Containment Cell

excavation and treatment of contaminants in the Capped Waste Stockpile (CWS) and placement in the Containment Cell

treatment of contaminated groundwater plume originating from the CWS

containment cell capping and completion

validation and audit of all aforementioned works as described in the RAP, EIS and

Response to **Submissions** (RtS)

The Applicant's response to issues raised in submissions received in relation to the application for consent for the development under the EP&A Act and includes the document titled Response to Submissions Report Former Hydro Aluminium Kurri Kurri Smelter Remediation, prepared by Ramboll, dated August 2020

RVR Remediation Validation Report, prepared in accordance with the NSW EPA Contaminated

Land Guidelines: Consultants reporting on contaminated land

**RWEMP** Remediation Works Environmental Management Plan

Sensitive A location where people are likely to work, occupy or reside, including a dwelling, school, receivers hospital, office or public recreational area

Site The land defined in Appendix 2

**Site Auditor** As defined in section 4 of the Contaminated Land Management Act 1997 (NSW) Site Audit Report As defined in section 4 of the Contaminated Land Management Act 1997 (NSW) Site Audit As defined in section 4 of the Contaminated Land Management Act 1997 (NSW)

Statement

Validation Consultant Person certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS/CSAM) scheme appointed to document and verify the remediation works and prepare the Remediation Validation Report in accordance with Condition B4.

**VFNM** Virgin Excavated Natural Material

Waste Has the same meaning as the definition of the term in the Dictionary to the POEO Act

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**WMP** Waste Management Plan

Year A period of 12 consecutive months

#### **SCHEDULE 2**

#### PART A ADMINISTRATIVE CONDITIONS

#### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

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.

#### **TERMS OF CONSENT**

- A2. The development may only be carried out:
  - (a) in compliance with the conditions of this consent;
  - (b) in accordance with all written directions of the Planning Secretary;
  - (c) in accordance with the EIS and Response to Submissions;
  - (d) in accordance with the RAP and CCDDR;
  - (e) in accordance with the Development Layout in Appendix 1; and
  - (f) in accordance with the management and mitigation measures in **Appendix 3**.
- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
  - (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 A3(a).
- A4. 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.

## **VOLUNTARY PLANNING AGREEMENT**

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.

## **LIMITS OF CONSENT**

## Lapsing

- A6. 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.
- 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.

## Independent Engineer's Deed

A8. 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 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.

## NOTIFICATION OF COMMENCEMENT

- A9. 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:
  - (a) commencement of remediation works; and
  - (b) completion of the remediation works.

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.

## SURRENDER OF EXISTING CONSENTS

- A11. Within 12 months of the date of commencement of development to which this consent applies, or within another timeframe agreed by the Planning Secretary, the Applicant must surrender any existing development consents in relation to the site in accordance with the EP&A Regulation, except:
  - (a) DA 118/692/102;
  - (b) DA 8/2015/399/1; and
  - (c) DA 8/2018/46/1.
- A12. 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.

**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.

#### **EVIDENCE OF CONSULTATION**

- A13. Where conditions of this consent require consultation with an identified party, the Applicant must:
  - (a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and
  - (b) provide details of the consultation undertaken including:
    - (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.

#### STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

- A14. With the approval of the Planning Secretary, the Applicant may:
  - (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);
  - (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
  - (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).
- 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.
- 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.

## PROTECTION OF PUBLIC INFRASTRUCTURE

- A17. Before the commencement of the remediation works, the Applicant must:
  - (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.
- A18. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
  - repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and

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(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

## **COMPLIANCE**

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.

#### **OPERATION OF PLANT AND EQUIPMENT**

- A20. All plant and equipment used on site, or to monitor the performance of the development, must be:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

#### **UTILITIES AND SERVICES**

A21. Before the construction of any utility works associated with the development, the Applicant must obtain relevant approvals from service providers.

#### **APPLICABILITY OF GUIDELINES**

- 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.
- 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.

## **ADVISORY NOTES**

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.

#### PART B SPECIFIC ENVIRONMENTAL CONDITIONS

#### REMEDIATION

#### Site Auditor

B1. 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).

#### **Remediation Works**

- B2. 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.
- B3. Remediation works must be undertaken by a suitably qualified and experienced contractor(s).

## Validation Consultant(s)

B4. 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.

## **Containment Cell Management Plan**

- B5. 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:
  - (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;
  - (e) describe the measures to be implemented to ensure adequate control of environmental impacts associated with the containment cell construction activities;
  - (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
  - (g) be prepared in accordance with the RAP and the CCDDR.

# B6. The Applicant must:

- (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.

# **Long-Term Environmental Management Plan**

- B7. 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:
  - (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:
    - (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;
- (iv) details of the contingency measures and responses to be implemented for any identified issues with the containment cell; and
- (v) mechanisms for performance reporting and auditing in line with the relevant legislation and guidelines;
- (d) incorporate a programme for ongoing review of the LTEMP to ensure it remains contemporary with relevant environmental standards.
- B8. As part of the LTEMP required under Condition B7, the Applicant must include the following:
  - (a) Landscaping Management Plan (see Condition B45); and
  - (b) Gas Monitoring Plan (see Condition B33).
- 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.

## **Remediation Validation Report**

- B10. 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:
  - (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;
  - (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:
  - (e) assess the results of any post-remediation testing against the remediation criteria set out in the RAP; and
  - (f) include, but not be limited to, a:
    - (i) Construction Quality Assurance report or equivalent;
    - (i) design report; and
    - (ii) waste classification report in accordance with EPA Waste Classification Guidelines.

## Site Audit Report and Site Audit Statement

- B11. 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:
  - (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.
- B12. 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:
  - (a) the remediation works for the relevant part of the Site have been completed in accordance with the RAP:

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- (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
- (c) the suitability of the relevant part of the land for the intended future uses.

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.

#### **WORK HEALTH AND SAFETY**

- B13. The Applicant must ensure that all remediation works are carried out in accordance with NSW Work Health and Safety Regulation 2017 (WHS Regulation) and relevant guidelines.
- B14. 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:
  - (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;
  - (b) identify personal protective equipment (PPE) required for use onsite;
  - (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;
  - (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;
  - (e) identify requirements for health monitoring for site personnel and documentation procedures; and
  - (f) details of exclusion zones and decontamination procedures.

## B15. The Applicant must:

- (a) not commence remediation works until the HSP required by Condition B14 is approved by the Planning Secretary; and
- (b) implement the most recent version of the HSP approved by the Planning Secretary.

## SOILS, WATER QUALITY AND HYDROLOGY

## **Imported Material for Containment Cell Construction**

- B16. The Applicant must:
  - 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.

## **Erosion and Sediment Control**

B17. 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.

## **Stormwater Management System**

- B18. 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:
  - (a) be generally in accordance with the design in the CCDDR;
  - (b) be in accordance with applicable Australian Standards;
  - (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;
  - (d) divert existing clean surface water around operational areas of the site;
  - (e) direct all sediment laden water in overland flow away from the leachate management system; and

- (f) prevent cross-contamination of clean and sediment or leachate laden water.
- 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.

#### TRAFFIC AND ACCESS

#### **Remediation Works Conditions**

- B20. The Applicant must ensure that:
  - 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
  - (e) vehicle manoeuvring areas must always be kept clear of any obstacles, including parked cars.

#### **Parking**

B21. 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.

## **Long-term Access**

B22. 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.

## **WASTE MANAGEMENT**

## **Statutory Requirements**

- B23. All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.
- 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.
- B25. The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the *Waste Classification Guidelines Part 1: Classifying Waste* (NSW EPA, November 2014), or its latest version and dispose of all wastes to a facility that may lawfully accept the waste.
- B26. The Applicant must retain all sampling and waste classification data in accordance with the requirements of the EPA.

## Pests, Vermin and Priority Weed Management

- B27. The Applicant must:
  - (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.

Note: For the purposes of this condition, 'priority weed' has the same definition as the term in the Biosecurity Act 2015.

## **AIR QUALITY**

## **Dust Minimisation**

- B28. The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.
- B29. The Applicant must ensure that:
  - 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
- (e) trucks associated with the development do not track dirt onto the public road network.

#### **Air Quality Management Plan**

- B30. 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:
  - (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;
  - include record keeping, a complaints register and compliance report to identify the control measures that will be implemented for each emission source; and
  - (f) show the type and locations of 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 Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA 2017) and National Environment Protection (Ambient Air Quality) Measure (NEPC 2016).

## B31. The Applicant must:

- (a) not commence remediation works until the AQMP required by Condition B30 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.

## **Odour Management**

B32. The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

#### **Gas Monitoring**

- B33. 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 LTEMP required by Condition B7. The GMP must:
  - (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.

#### **NOISE**

#### **Hours of Work**

B34. The Applicant must comply with the hours detailed in **Table 1**, unless otherwise agreed in writing by the Planning Secretary.

Table 1 Hours of Work

Activity	Day	Time
Remediation works	Mondays – Fridays	7 am to 6 pm
	Saturdays	7 am to 1 pm

- B35. Works outside of the hours identified in Condition B34 may be undertaken in the following circumstances:
  - (a) works that are inaudible at the nearest sensitive receivers;
  - (b) works agreed to in writing by the Planning Secretary; and

(c) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

## **Remediation Works Noise Limits**

B36. Remediation works must be undertaken to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (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 the Interim Construction Noise Guideline (DECC, 2009).

#### **Vibration Criteria**

- B37. Vibration caused by the remediation works at any residence or structure outside the site must be limited to:
  - (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).

#### **ABORIGINAL HERITAGE**

B38. 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 *Archaeological Sensitivity Figure*, must be placed on geo-matting.

#### **Unexpected Finds Protocol**

- B39. If any previously unidentified item or object of Aboriginal heritage significance is identified on site:
  - (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.
- B40. Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the *National Parks and Wildlife Act 1974* (NSW).

#### **BIODIVERSITY**

- B41. Prior to vegetation clearing for remediation works, or within another timeframe agreed with the Planning Secretary, the Applicant must, in accordance with the *Biodiversity Conservation Act 2016*, retire:
  - (a) 155 ecosystem credits, including:
    - 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
    - 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
  - (b) 582 species credits, including:
    - i. 19 species credits for Green-thighed frog (Litoria brevipalmata);
    - ii. 35 species credits for Koala (Phascolarctos cinereus);
    - iii. 313 species credits for Southern Myotis (Myotis macropus);
    - iv. 89 species credits for Regent Honeyeater (Anthochaera phrygia);
    - v. 56 species credits for Eucalyptus parramattensis subsp. decadens (*Eucalyptus parramattensis subsp. decadens*); and
    - vi. 70 species credits for Small-flower Grevillea (Grevillea parviflora subsp. parviflora).

to offset the removal of 2.5 hectares of vegetation on site.

## **Biodiversity Management Plan**

- B42. 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:
  - (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.

## B43. The Applicant must:

- (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.

#### **VISUAL AMENITY**

#### Lighting

- B44. The Applicant must ensure the lighting associated with the development:
  - (a) complies with the latest version of AS 4282-1997 Control of the obtrusive effects of outdoor lighting (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.

#### Landscaping Management Plan

- B45. 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:
  - (a) be prepared in consultation with Environmental Services Group of H&P Group or its successors;
  - (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.
- B46. The Applicant must implement the most recent version of the LMP approved by the Planning Secretary.

## **HAZARDS AND RISK**

# **Pre-construction Studies**

- B47. 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, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The study must meet the requirements of Fire and Rescue NSW.
  - (b) A **Construction Safety Study**, prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety'*. The Construction Safety Study shall also review Appendix 03 of the CCDDR and address all relevant requirements.

## **Pre-commissioning**

- B48. Prior to commencement of filling of the containment cell, the Applicant must prepare and implement the plans and systems set out under subsections (a) and (b) below.
  - (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'.

## **Pre-start-up Compliance**

B49. 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.

## **Bunding**

- B50. 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 *Storing and Handling of Liquids: Environmental Protection Participants Manual* (Department of Environment and Climate Change, 2007).
- 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.

## **Fire Management**

- B52. The Applicant must:
  - (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.

#### **COMMUNITY ENGAGEMENT PLAN**

- B53. The Applicant must prepare a Community Engagement Plan for the development, to the satisfaction of the Planning Secretary. The Plan must:
  - (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;
  - 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.
- B54. The Applicant must implement the approved Community Engagement Plan for the duration of the development.

## PART C ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### **ENVIRONMENTAL MANAGEMENT**

#### Management Plan Requirements

- C1. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) details of:
    - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - (ii) any relevant limits or performance measures and criteria; and
    - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - 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:
    - (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;
  - 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:
    - 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.

**Note:** the Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

#### REMEDIATION WORKS ENVIRONMENTAL MANAGEMENT PLAN

- C2. The Applicant must prepare a Remediation Works Environmental Management Plan (RWEMP) in accordance with the requirements of Condition C1. The RWEMP must:
  - (a) be approved by the Planning Secretary prior to the commencement of remediation works;
  - (b) identify the statutory approvals that apply to the development;
  - 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;
  - 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.
- C3. As part of the RWEMP required under Condition C2 of this consent, the Applicant must include the following:
  - (a) Containment Cell Management Plan (see Condition B5);
  - (b) Erosion and Sediment Control Plan (see Condition B17);
  - (c) Air Quality Management Plan (see Condition B30);
  - (d) Biodiversity Management Plan (see Condition B42);

- (e) Health and Safety Plan (see Condition B14); and
- (f) Community Consultation and Complaints Handling.

#### C4. The Applicant must:

- (a) not commence remediation works until the RWEMP is approved by the Planning Secretary; and
- (b) carry out the remediation works in accordance with the RWEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.

#### **REVISION OF STRATEGIES. PLANS AND PROGRAMS**

- 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.

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:** 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.:

#### REPORTING AND AUDITING

## Incident Notification, Reporting and Response

C7. 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**.

## **Non-Compliance Notification**

- C8. 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.
- C9. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that 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.
- C10. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

## **Compliance Reporting**

- C11. 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:
  - (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.
- 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.

## **Independent Audit**

- C13. Within one year of the commencement of remediation works, and every two 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).
- C14. In accordance with the specific requirements in the *Independent Audit Post Approval Requirements* (Department, 2020), the Applicant must:
  - (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.

## **Monitoring and Environmental Audits**

C15. 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 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.

## **ACCESS TO INFORMATION**

- C16. At least 48 hours before the commencement of remediation works until the completion of all works under this consent, the Applicant must:
  - (a) make the following information and documents (as they are obtained or approved) publicly available on its website:
    - (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;
    - 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;
    - audit reports prepared as part of any Independent Audit of the development and the Applicant's response to the recommendations in any audit report;

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- (xi) any other matter required by the Planning Secretary; and
- (b) keep such information up to date, to the satisfaction of the Planning Secretary.

# APPENDIX 1 DEVELOPMENT LAYOUT PLANS

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

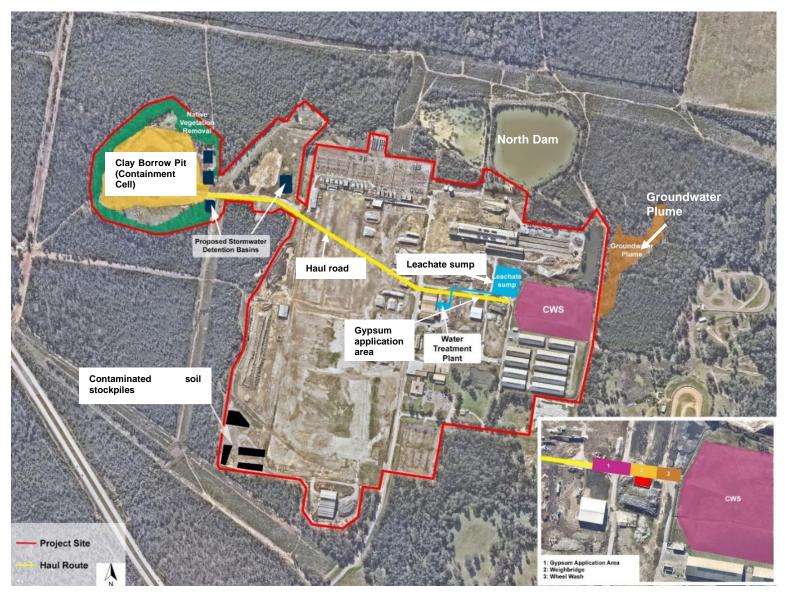


Figure 1 | Main Components of the Development

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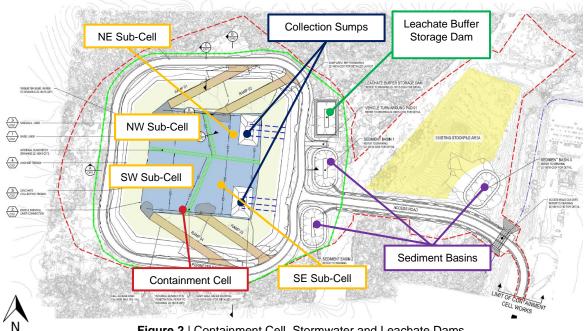


Figure 2 | Containment Cell, Stormwater and Leachate Dams

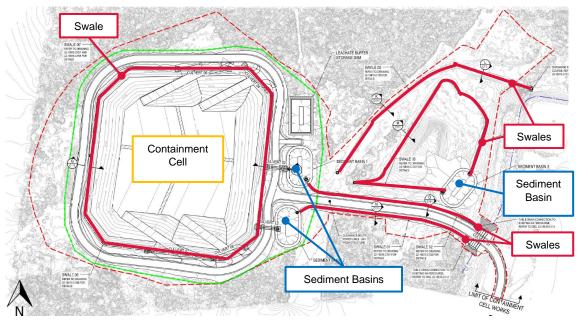


Figure 3 | Proposed Stormwater Management System

# APPENDIX 2 SCHEDULE OF LAND

Lot Number	Deposited Plan (DP)
318	755231
319	755321
411	755231
412	755231
413	755231
414	755231
420	755231
769	755231
Part 16	1082775
1	456769
2	456769
Part 3	456769

# APPENDIX 3 APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

Environmental Aspect	Management Measure
Site Establishment	
General	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 <b>Section 8.1.4</b> 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.
Air Quality	Maintain the five existing 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.
Soil and Water	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.
Traffic and Access	In consultation with Cessnock City Council and Transport for NSW, general signposting of the construction vehicle routes with appropriate heavy vehicle and construction warning signs.
	Installation of specific warning signs at Dickson Road to warn existing road users of entering and exiting construction traffic.
	The initial internal access restrictions and alternative access routes would be established for the initial Works phase.
Aboriginal Heritage	Precautionary fencing of Hydro-IA35-15 prior to surface collection.
	Surface collection and relocation of newly identified isolated artefact Hydro-IA35-15.
Biodiversity	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.
Waste	The designated storage and stockpile areas would be established, including the installation of the environmental controls described in <b>Section 8.2.1</b> of the EIS.
The Works	
Air Quality	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.
	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.

#### **Environmental Aspect**

#### **Management Measure**

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 off-site, 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.

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.

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.

# Truck drivers are to be informed of site access routes, acceptable delivery hours and must minimise extended periods of engine idling.

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 of the EIS 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 of the EIS.

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.

## **Noise and Vibration**

# Environmental Aspect

#### **Management Measure**

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 Works activities the following steps would be undertaken:

- 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.

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

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 EPA 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.

## **Traffic and Access**

The promotion of carpooling for construction staff and other shared transport initiatives.

Management of the transportation of materials and 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.

# Soil and Water

## NSW Government Department of Planning, Industry and Environment

#### **Environmental Aspect**

#### Management Measure

#### **Aboriginal Heritage**

A speed limit of 20km/hr would be imposed on internal roads.

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:

- All works would cease immediately in the area to prevent any further impacts to the site.
- Notify the Works' Environment Officer.
- 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.
- 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:

- All work in the vicinity of the remains should cease immediately.
- The location should be cordoned off and the appropriate authorities notified.
- 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:

- 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.

If the remains are identified as historic non-Aboriginal, the site would be secured and the NSW Heritage Branch contacted.

## Non-Indigenous Heritage

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.

## Biodiversity

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.

#### Energy Efficiency/ Greenhouse Gas

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 dioxide (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.

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.

#### Waste

Environmental Aspect	Management Measure
	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.
	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.
Human Health	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> <li>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).</li> </ul>
	<ul> <li>Appropriate masks would be required to prevent dust (including asbestos) inhalation.</li> <li>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).</li> <li>Personnel involved in the handling of the gypsum would be required to wear the applicable personal protective equipment</li> </ul>
	Real-time ambient air monitoring would be undertaken at several locations around the Capped Waste Stockpile 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.
	Real-time ambient air monitoring would be undertaken inside machinery housings, and workers within these housings would also have appropriate respirators available.
Containment Cell Management	
Visual	The Containment Cell vegetation cover would be maintained (as described in <b>Section 9.1.2</b> of the EIS).
Air Quality	As discussed in <b>Section 9.1.1.3</b> of the EIS, gas monitoring would be completed from the gas monitoring vents on a quarterly basis, until results indicate that gas generation is not an issue. Gas monitoring would be completed for ammonia and methane.
	In the event that gas concentration trigger levels outlined in the OEMP are exceeded, appropriate contingency responses would be implemented.

#### APPENDIX 4 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

#### WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

- 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.
- 2. Written notification of an incident must:
  - 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.

## INCIDENT REPORT REQUIREMENTS

- 3. 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.
- 4. The Incident Report must include:
  - a. a summary of the incident;
  - b. outcomes of an incident investigation, including identification of the cause of the incident;
  - 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.