

Department of Planning, Industry and Environment  
4 Parramatta Square  
12 Darcy St  
Parramatta NSW 2150  
Attention: Sheelagh Laguna  
Email: [sheelagh.laguna@planning.nsw.gov.au](mailto:sheelagh.laguna@planning.nsw.gov.au)

Date 25/01/2021

## **Modification to the development consent for SSD 6666 for the construction and operation of an onsite Temporary Water Treatment System**

Development consent for State Significant Development (SSD) 6666 was granted to Hydro Aluminium Kurri Kurri Pty Ltd (Hydro) under Part 4 of the *Environmental Planning and Assessment Act 1979* on 23 December 2020 for remediation of the former aluminium smelter at Hart Road Loxford (the Project).

The approved project included the management of leachate collected during remediation activities at the Smelter via an offsite method (pumping leachate from collection sumps by a licensed liquid waste contractor for treatment at a licensed facility) with the option for an onsite Temporary Water Treatment Plant. The Response to Submissions Report notes that *"In the event that Hydro decides to proceed with construction and operation of an on site leachate treatment plant, Hydro would submit a detailed design for review and approval by the Department and the EPA"*.

Since submission of the Response to Submissions Report, Hydro has undertaken further review of the environmental and economic factors associated with onsite versus offsite treatment methods of leachate and has determined that temporary onsite treatment is preferred during the remediation works. A modification to the development consent for SSD 6666 is therefore required to enable the construction and operation of an onsite Temporary Water Treatment Plant and associated infrastructure, collectively called the Temporary Water Treatment System, and to enable discharge of the treated leachate to the existing water management system (the Modification).

Ramboll  
Level 2, Suite 18 Eastpoint  
50 Glebe Road  
PO Box 435  
The Junction  
NSW 2291  
Australia

T +61 2 4962 5444  
<https://ramboll.com>

The Modification is generally comprised of the following activities:

- Construction of an onsite Temporary Water Treatment System comprised of:
  - Onsite Temporary Water Treatment Plant adjacent to the Capped Waste Stockpile
  - Associated pipelines and infrastructure
- Construction of a pipeline from the Containment Cell leachate storage dam to the Temporary Water Treatment Plant
- Operation and ongoing maintenance of the Temporary Water Treatment System
- Discharge of treated water to the existing Smelter water management system
- Decommissioning of the Temporary Water Treatment System when leachate generation rates make the offsite treatment more suitable (forecast to be approximately 12 months after cell capping).

The proposed location of the onsite Temporary Water Treatment Plant is only about 200 metres northeast of the location shown in Appendix 25 of the Response to Submissions Report. It also requires a minor modification of the location of the one megalitre leachate storage dam near the Capped Waste Stockpile to accommodate the proposed relocation of the treatment plant. Relocating the treatment plant to directly adjacent to the dam removes the need for the connecting pipeline of 170 metres length.

Offsite treatment would be retained as a potential leachate treatment option: it would, however, only be used: when needed due to excessive leachate generation (actual or predicted), if the onsite treatment plant was unavailable for maintenance; and when leachate production levels are low enough to not warrant the operation of the onsite treatment plant.

A figure showing the location of the proposed Temporary Water Treatment System infrastructure is provided as an attachment to this letter. The location is consistent with the proposed location presented in the Response to Submissions Report. Further details on the Temporary Water Treatment System would be provided in the Statement of Environmental Effects to supporting the Modification Application.

A Statement of Environmental Effects (SEE) has been prepared in accordance with the Department of Planning, Industry and Environment *Modifying an Approved Project Draft Environmental Impact Assessment Guidance Series* (June 2017) to support the modification to the development consent for SSD 6666 under section 4.55(2) of the EP&A Act.

Section 4.55(2) of the EP&A Act allows for a development consent to be modified by the consent authority to which the original application was made, provided the modification is “*substantially the same development*” for which the consent was originally granted. The Modification is considered to be substantially the same development to the approved under SSD 6666 as:

- The overall nature and scale of the development remains similar
- The environmental impacts associated with the development are substantially the same
- The majority of the development remains unchanged to that approved.

Additionally, onsite treatment provides greater certainty during the remediation activities regarding leachate management by expanding the treatment options available to Hydro and the Remediation Contractor. On site treatment provides Hydro and the Remediation Contractor an on site option over which they have direct management, which would be complemented by the existing off site treatment facilities.

The key issues considered in the SEE include:

- Soil and water
- Hazards and risks
- Air quality and odour
- Noise and vibration
- Transport and access
- Visual
- Waste
- Biodiversity
- Heritage.

The SEE compares the potential impacts of the approved project under SSD 6666 to any changes that may occur as a result of the Modification and recommend any additional management and mitigation measures where required.

It should be noted that the remediation contract with Daracon includes the establishment and operation of the Temporary Water Treatment Plant and is reflected in the contract value and schedule. This is relevant due to the financial security requirements of the VPA. The value of the relevant project phases and corresponding bank guarantees already includes the temporary water treatment.

Hydro invites the Department of Planning, Industry and Environment to provide comment on the Modification, including confirmation that the described approach for the SEE for assessing the potential environmental impacts of the Temporary Water Treatment System would satisfy your requirements.

We are also consulting with the Environment Protection Authority directly to comment on the Modification. We will submit the Modification Application once we have completed this consultation and consider any raised in completing the SEE.

To allow us to complete the SEE and formally submit the Modification Application, we request that you respond by 8 February 2021.

Please feel free to give me a call should you wish to discuss or to arrange a meeting.

Yours sincerely

A handwritten signature in black ink, appearing to be 'S. Taylor', with a long horizontal line extending to the right.

**Shaun Taylor**

Senior Managing Consultant

D +61249625444

M +61408386663

[staylor@ramboll.com](mailto:staylor@ramboll.com)



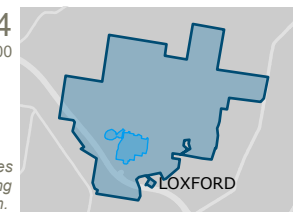


Aerial photography by Nearmap, flown 15.06.2020

## Legend

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

A4  
1:8,000



Ramboll Australia does not warrant that this document is definitive nor free of error and does not accept liability for any loss caused or arising from reliance upon information provided herein.