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Department of Planning and Environment **Industry Assessments**

Via e-mail at: information@planning.nsw.gov.au

Attention: Ms Emma Barnet

13 February 2018

Dear Mr McNicoll

Weston Aluminium Pty Limited – SSD7396 Response to Independent Review of Draft Concentration Limits

I refer to the email from Weston Aluminium Pty Limited (Weston Aluminium) dated 6 December 2017 providing an "Independent Review of the Draft Concentration Limits for the Weston Aluminium Thermal Waste Processing Project" by Todoroski Air Services dated 4 December 2017 (TAS 2017) and furthermore, to the revised recommended Conditions of Approval (CoA) provided by the Environment Protection Authority (EPA) to the Department of Planning and Environment (DPE) on 28 July 2017.

Firstly, the EPA has continually requested additional information as part of its assessment of the proposal so as to properly assess the proposal and to properly protect human and environmental health and does not consider these requests to be unwarranted or "minutiae", especially when one considers the very nature of the proposal.

Secondly, the EPA has reviewed TAS 2017 and remains of the belief that there is insufficient detail to change the recommended CoA. It is recommended that DPE advise Weston Aluminium that they need to provide:

- 1. The technical justification for the design engineer recommended emission concentration limits including, but not limited to, the manufacturer specifications, detailed plant design information, process flow rates and a comparison with applicable (in terms of proposed technology and waste streams) best practice reference facilities; and
- 2. The profiles of all possible wastes stream scenarios and their associated emissions, or if this is not possible, agree to rigorous post commissioning testing in accordance with an approved Proof of Performance Plan.

The comments and analysis of TAS 2017 as provided at **Attachment A** has been provided in support of the EPA's recommendations as outlined above for Weston Aluminium's reference, as well as to provide general feedback.

If Weston Aluminium choose not to profile all possible waste stream scenarios and their associated emissions, then a requirement to undertake rigorous post commissioning testing will be recommended as a condition of any project approval. If post commissioning testing indicates low variability in emissions then the EPA may consider a reduction in continuous monitoring requirements.

I trust this information clarifies the EPA's position on this proposal.

If you have any questions about this matter, please contact me on (02) 4908 6830.

Yours sincerely

MATTHEW CORRADIN
Senior Operations Officer

Environment Protection Authority

ATTACHMENT A

The emission concentration limits for the project must reflect Best Available Technology (BAT)

The *Protection of the Environment Operations (Clean Air) Regulation 2010* (the Clean Air Regulation) sets the maximum emissions permissible for an industrial source in NSW which reflect reasonably available technology and good environmental practice (as modelled in Scenario 2). The EPA sets emission limits which reflect the proper and efficient operation of the plant and equipment to protect both human and environmental health and also the amenity of the surrounding community.

Depending on the plant and equipment and the outcomes of the Air Quality Impact Assessment, emission limits can be more stringent than those prescribed by the Clean Air Regulation. International best practice process design and emission control is appropriate for a proposal that involves the incineration of hazardous waste. The emission concentration limits for the proposal therefore, as a minimum, must reflect best practice process design and emission control(s).

Alternate emission limits broadly consistent with BAT

TAS 2017 proposes alternate emission concentration limits to those recommended by the EPA.

The limits are based on consideration of design engineer recommended concentrations and EU reference information concerning Best Available Techniques (BAT) for hazardous waste incineration¹.

Further information needed to support proposed limits

It is encouraging that Weston Aluminium has provided the design engineer recommended concentrations in Table 2 of TAS 2017. The EPA requested such information continually throughout the development application process. For these to be considered further, technical justification of the design engineer recommended concentrations must be provided as outlined in page 1 above. This will enable EPA to develop limit conditions (including oxygen concentration) based on the operation of the proposed plant and equipment where it is operated in a proper and efficient manner.

It is noted that the proposed H_2SO_4 limit may give rise to ground level H_2SO_4 concentrations close to the impact assessment criterion. In this case, an H_2SO_4 concentration less than that proposed in Table 2 of TAS 2017 would be appropriate. Further, it is noted that TAS 2017 refers to the EU metals emission limit for hazardous waste incineration as an annual average. The Industrial Emissions Directive² states the averaging period for the metals air emission limit is a minimum of 30 minutes and maximum of 8 hours. The IED also provides average emission limits for Cd and Hg of 0.05 mg/Nm³ over the same averaging period.

Further information required to support proposed reduction in CEMS monitoring

The review also proposes that CEMS monitoring of process parameters (CO or VOCs, O₂ and temperature), opacity and bag house filter pressure be undertaken and that there is no environmental or technological risk that would drive the need for other continuous monitoring (HCl, NOx, TSP, SO₂, VOC) at this location. The lack of evidence regarding the variability in air emissions is one driver for the inclusion of a wide range of CEMS in the draft licence conditions. In the meeting of 9 August 2017, Weston Aluminium informed EPA that the ratio of feedstock composition cannot be controlled. Thus, Weston Aluminium could process 100% of quarantine wastes at any one time (for example). As discussed in the meeting, in order for the EPA to consider a reduction in CEMS monitoring, Weston Aluminium needs to:

¹ Integrated Pollution Prevention and Control, Reference Document on the Best Available Techniques for Waste Incineration, European Commission, August 2006.

² Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on Industrial Emissions (Integrated Pollution Prevention and Control), Official Journal of the European Union.

³ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on Industrial Emissions (Integrated Pollution Prevention and Control), Official Journal of the European Union.

- 1. Profile all possible waste stream scenarios and their associated emissions; or
- 2. Undertake rigorous post commissioning testing in accordance with an approved Proof of Performance Plan to understand the variability in emissions.