

Primary Metal

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Department of Planning and Environment
PO Box 39
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Attention: Emma Barnet

Our date: 18-10-2016

Weston Aluminium Dross Recycling Facility: 10397 of 1995 Modification 8 and 86-04-01 Mod 10 Modification (remove distinction between Spent Pot Lining types) Hydro Aluminium Kurri Kurri Pty Ltd Submission

Hydro Aluminium Kurri Kurri Pty Ltd (Hydro) has prepared this submission in response to the exhibition of the *Environmental Assessment: Spent Potlining Processing* (AECOM, 2016) prepared on behalf of Weston Aluminium Pty Ltd (Weston Aluminium) to support applications for Modification to the Project Approvals for DA 86_04_01 and DA_10397 of 1995.

1. INTRODUCTION

Hydro understands that the purpose of the proposed modifications is to allow Weston Aluminium to process first cut, second cut and mixed grade spent pot lining at its facility. The current approvals permit Weston Aluminium to process up to 40,000 tonnes per year of second cut spent pot lining and aluminium dross.

Hydro acknowledges that Weston Aluminium currently offers an option for the processing of second cut spent pot lining to enable recycling and that Weston wish to expand this capability to include first cut spent pot lining.

Hydro supports any project that directly reuses or facilitates the recycling of spent pot lining that is properly assessed and justified in accordance with applicable waste policies and environmental laws.

Hydro believes that additional information to that provided in the EA, and clarification of some of the information in the Environmental Assessment (EA), is required to allow the Department of Planning and Environment (the department) to adequately consider and determine the Modification Application in accordance with applicable waste policies and environmental laws. This will also assist in better informing the community regarding Weston Aluminium's proposal.

As the department may be aware, Hydro has approximately 80,000 tonnes of first cut and second cut spent pot lining stored at the former aluminium smelter at Kurri Kurri (the Hydro Smelter). Hydro is currently identifying and assessing a range of processing and/or reuse opportunities for this spent pot lining with reference to the NSW Environment Protection Authority (EPA) Waste Hierarchy which aligns with the objectives of the *Waste Avoidance and Resource Recovery Act 2001*. In particular, Hydro is in negotiations with Weston Aluminium, along with other potential direct reuse and processing facilities in Australia and internationally, to manage Hydro's stored spent pot lining. As such Hydro has a strong interest in the proposal from Weston Aluminium.

The key purposes of Hydro's review of the EA and this submission are to:

- Comment on the EPA Waste Hierarchy as it applies to spent pot lining and how Weston Aluminium is placed within this hierarchy, and the options available for the management of spent pot lining; and

- Identify key aspects of the EA where Hydro believes that the project has not been adequately or correctly assessed or justified in accordance with the Waste Hierarchy and applicable environmental laws.

2. EPA WASTE HEIRARCHY AND SPENT POT LINING

Hydro acknowledges the EPA's Waste Hierarchy, which describes the following from most preferable to least preferable as waste management options:

- Avoid and reduce waste.
- Reuse waste (direct reuse without further processing)
- Recycle waste (processing waste materials to make the same or different products).
- Recover energy.
- Treat waste.
- Dispose of waste.

Hydro acknowledges that Weston Aluminium currently offers an option for the processing of second cut spent pot lining, and this EA proposes the processing of first cut spent pot lining and mixed grade spent pot lining. Weston Aluminium provides the first step in the recycling of spent pot lining, and that recycling is a better outcome for spent pot lining than disposal.

However, Hydro is examining a number of options for the management of its stored spent pot lining that include both recycling (including Weston Aluminium) and direct reuse. Direct reuse of the spent pot lining is more preferable to Hydro on social, environmental and economic grounds and is consistent with the EPA Waste Hierarchy.

2.1. Spent Pot Lining Reuse and Recycling Options

The EA makes limited reference to the current options for the reuse and recycling of spent pot lining currently used or under investigation by the Australian aluminium smelter industry.

Page 1 of the EA states *"At present, significant stockpiles of SPL exist within NSW and interstate, with limited technologies and reuse options developed for the sustainable processing of these materials. Domestic smelters continue to stockpile surplus SPL and/or export the waste to Europe for subsequent treatment. Such treatment is performed at significant expense, and relies on the transport of dangerous and hazardous materials over many jurisdictions and the vagaries of third party countries. This strategy is clearly not sustainable for the domestic industry."*

Page 10 of the EA states *"The 'do nothing' option would involve the continuation of existing stockpiling and/or methods for disposal of SPL waste material by the primary aluminium sector. If the Project does not proceed, SPL material will continue to be stockpiled and/or transported overseas for processing at considerable cost to local aluminium smelters. The Project offers a more cost effective and environmentally sustainable solution to the management of SPL material than is currently available to aluminium smelters, and is the preferred option rather than doing nothing."*

Alternatives to processing SPL at the WA site or overseas include establishing a new facility for the processing of SPL. As the currently facility is already established and set up for processing SPL with all relevant environmental management processes in place, the additional impacts associated with the establishment of a new facility preclude it from further consideration as an alternative option."

Hydro believes that this is not an accurate reflection of the spent pot lining reuse and/or recycling methods used by and opportunities available to Australian aluminium smelters. The following clarifications are provided:

- Spent pot lining being generated at operational aluminium smelters is either being directly reused (without processing) or recycled at facilities both within Australia and internationally. These smelters do not continue to stockpile newly generated spent pot lining.
- The EA infers that the only options for the processing and/or reuse of spent pot lining for Australian smelters are: Weston Aluminium; sending it overseas for processing; or to establish a new spent pot lining processing facility. This inference is incorrect. Hydro Aluminium is currently in negotiations with a number of Australian and international facilities that directly reuse spent pot lining. This includes the potential recycling options Weston Aluminium identified for its processed by-product on page 4 of the EA.
- The international transportation of spent pot lining for direct reuse or recycling is cost competitive with local options, using options that are compliant with NSW, Australian and international legislation, regulations and convention. The aluminium smelter industry would not examine and use such options if they were not cost-competitive.
- Direct reuse of spent pot lining provides greater certainty for the aluminium smelter industry. Once the spent pot lining is used there is no by-product for which final processing and recycling is dependent on the processor finding a customer. It also removes any uncertainty and risks about the use and handling of the process by-product (prior to or following its final processing/ recycling).

2.2. Weston Aluminium By-Product Recycling Options

While page 4 of the EA identifies potential recycling options (slag additives for the steelmaking industry, cement manufacture and brick and tile manufacture) there is no certainty that businesses in these industries would take this material and complete its recycling. The EA also fails to state whether the process by-product would be used only in Australia, or would require export to international markets.

Without identifying specific receiving facilities, Weston Aluminium provides no certainty that the processed spent pot lining would have a final destination, and therefore complete the recycling process required to render the Weston Aluminium process by-product inert. In addition the EA does not discuss how or where the unprocessed spent pot lining or the process by-product would be stored long term if there is no available market for the material.

For Hydro this is a critical issue. Hydro currently has approximately 80,000 tonnes of first cut and second cut spent pot lining stored at the Hydro Smelter. Due to the demolition and remediation planned for the Smelter, Hydro has a limited timeframe (three years) within which the removal (and reuse or recycling) of the stored spent pot lining at the Hydro Smelter is to be completed. As such Hydro requires certainty that the spent pot lining would be removed from the Smelter and reused or recycled, and would not potentially have to remain at the Smelter, or be returned to Hydro and an alternative reuse or recycling option identified.

It should be noted that the potential markets for the process by-product described in the EA are also potential markets for the direct reuse of untreated spent pot lining. This includes limited existing and yet to be developed options in Australia and, predominantly, international markets. As such the process by-product would also be subject to the same “*vagaries of third party countries*” (page 1) as untreated spent pot lining.

While the EA states that “*WA is offering a domestic solution for the processing of SPL, which will eliminate the need for transport of this hazardous waste offshore*” (page 15), Weston Aluminium should confirm if the process by-product would only be recycled in Australia or would also require international transportation to its final recycling location. Weston Aluminium should also confirm that the process by-product is no longer defined as hazardous waste, in accordance with NSW Waste Guidance.

3. EA CLARIFICATION AND JUSTIFICATION REQUIREMENTS

3.1. By-Product and Process Details

In addition to providing limited detail on the recipients for the process by-product, the EA fails to provide adequate details on the characteristics of the process by-product. Previous EA prepared by Weston Aluminium have also failed to provide such detail.

Given the chemical and physical differences between first cut spent pot lining and second cut spent pot lining (which are presented in Table 10 of the EA, but without reference to the source of the data), Hydro believes that further information is required to address the following issues relating to the chemical and physical characteristics of the process by-product.

- As is discussed further in Section 3.3 of this letter, while page 14 of the EA notes that spent pot lining is “*classed as dangerous good Class 4.3 in accordance with the Australian Dangerous Goods Code*”, the EA fails to specifically address the reason that results in spent pot lining being deemed dangerous (the potential for generation of flammable gases when in contact with water). This EA and the previous EA relating to the treatment of second cut spent pot lining in 2012 did not identify storage within an enclosed storage area to stop the ingress of rain: that this would be done was only described in “*Table 11 Preliminary Risk Screening - Gap Analysis*” on page 30 of the EA.
While the EA noted in several locations that the process results in the destruction of cyanide in the spent pot lining, there is no description of quality control procedures to confirm the destruction of cyanide, or confirmation that the processed spent pot lining would not generate flammable gases when in contact with water.
- Table 4 (Analytical Laboratory Analysis Results – Product Materials) of Appendix B of the Air Quality Impact Assessment (Appendix E the EA) provides a summary of the chemical analysis results of product from spent pot lining processing trials (sourced from Tomago Aluminium) undertaken in 2010. While it does not specify which spent pot lining cut is reflected in the results, the fluoride and sodium results (total and leachable) provide an indication:
 - Sample T1 appears to be processed second cut spent pot lining. While it had an average of 45,800 mg/kg of total fluoride, the average for TCLP leachable fluoride was 58 mg/L. The average for total sodium was 2,100 mg/L, and the average for TCLP leachable sodium was not available.
 - Sample T2 appears to be processed first cut spent pot lining. It had an average of 62,700 mg/kg of fluoride, with TCLP leachable fluoride with an average of 808 mg/L. The average for total sodium was 36,100 mg/kg, and an average of TCLP leachable sodium was 1,740 mg/L.The Analytical Laboratory Certificates that provide the detailed results that form the basis of the average results are stated as being in Attachment 4 of the report, but are not provided in the publicly available document. As such it is unclear how many samples the average is based on, or the variability of the results. From Hydro’s experience there is great variability of these compounds in spent pot lining, and an average alone may not provide a great indication of the spent pot lining characteristics.
- Table 3 (Summary of Analytical Laboratory Analysis Results) from the Monitoring and Verification Report Mixed Spent Potlining Processing Trial (Appendix B of the EA) presents a summary of the chemical analysis results of product from mixed spent pot lining processing trials (sourced from Tomago Aluminium) undertaken during 2015 and 2016. The average for fluoride results (total and leachable) were 49,000 mg/kg of total fluoride, with TCLP leachable fluoride of 397 mg/L.
The Analytical Laboratory Certificates that provide the detailed results that form the basis of the summary result are stated as being in Attachment 4 of the report, but are not provided in the publicly available document.
- Despite the differences shown in these tables, the Hazard and Risk section of the EA states “*The treated product materials of First Cut and Mixed SPL are similar to the treated product material derived from the processing of Second Cut SPL. Therefore, no significant change to the risk profile is expected to arise*

from the treated product material of First Cut and Mixed SPL" (page 29). This is despite the process by-product results in the tables described above showing major differences in the levels of a number of key chemicals between the processed first cut spent pot lining and second cut spent pot lining.

- From the results for leachable fluoride described above, it would appear that the processed first cut spent pot lining from the 2010 trial and the processed mixed grade spent pot lining from the 2015/ 2016 trials would be categorised as "aluminium smelter waste containing leachable fluoride and/or cyanide" under the *Environmentally Hazardous Chemicals Act 1985* (with leachable fluoride above 150 mg/L). The processed first cut spent pot lining from the 2010 trial would be deemed hazardous waste under the *Protection of the Environment Operations Act 1997* (with leachable fluoride above 600mg/L). It is unknown if any of the samples from the 2016 trial of mixed grade spent pot lining exceeded the leachable fluoride level to have it deemed "aluminium smelter waste containing leachable fluoride and/or cyanide". The issue of the fluoride levels is noted by Weston Aluminium itself, in the Monitoring and Verification Report Spent Potlining Material Processing Trial (Appendix B of the Air Quality Impact Assessment): "Fluoride leachability remains elevated for each Batch product, and depending upon treated product end use application, further work may be required to improve fluoride fixation/immobilisation."

The EA needs to clearly describe why the processed spent pot lining should not be deemed "aluminium smelter waste containing leachable fluoride and/or cyanide" and/or hazardous waste due to the elevated fluoride levels.

Hydro Aluminium acknowledges that the purpose of the process is for the spent pot lining to be partially (thermally) treated to produce process by-product that does not need to be transported as a Dangerous Good (and for the purpose of exporting does not need to comply with the requirements of the *Hazardous Waste (Regulation of Exports and Imports) Act 1989*).

However, for the processed spent pot lining to become inert (and potentially no longer "aluminium smelter waste containing leachable fluoride and/or cyanide" and/or a hazardous waste), Weston Aluminium would need to find a recipient for the process by-product that subsequently uses the processed spent pot lining in some beneficial manner which ultimately removes the hazardous nature of the material.

Hydro believes that further information is required to be provided by Weston Aluminium to justify the description of the processed spent pot lining as a product, and that it is not an "aluminium smelter waste containing leachable fluoride and/or cyanide" under the *Environmentally Hazardous Chemicals Act 1985* and/or a hazardous waste under the *Protection of the Environment Operations (Waste) Regulation 2014*.

3.2. Spent Pot Lining Supply

The EA provides very limited information on the potential sources of the first cut spent pot lining and mixed grade spent pot lining. Page 9 of the EA simply states "Raw material (SPL) will be sourced from various domestic aluminium smelters, as is currently the case with Second Cut SPL and dross." No detail is provided on any negotiations that Weston Aluminium has had with potential suppliers of first cut spent pot lining or mixed grade spent pot lining. The EA also fails to quantify the amount of first cut spent pot lining or mixed grade spent pot lining that could be available to Weston Aluminium.

With reference to the quantity of spent pot lining potentially available, page 2 of the EA states "The quantification of existing SPL stockpiles and forecast SPL generation rates by aluminium smelters within eastern States, and the investigation of an agreement feasibility between government and industry for priority stockpile clearing, is currently the focus of the Department of Environment's (DoE) 2016 'Spent Pot Lining project (feasibility of an agreement for clearing stockpiles)' Project. WA is participating in this initiative." The EA does not describe any other actions undertaken by Weston Aluminium to quantify the available spent pot lining that could be processed at its facility.

Hydro understands that Weston Aluminium currently has no contracts for the receipt and processing of spent pot lining. As such spent pot lining could be sourced from domestic aluminium smelters, but there is no guarantee for the supply of this material.

Page 2 of the EA states “*Whilst it is now current practice to segregate First and Second Cut SPL into separate stockpiles for storage, legacy management practices at some aluminium smelter have resulted in mixed stockpiles of SPL material being available for processing with varying ratios of First to Second Cut SPL. Stockpiles of First Cut, Second Cut and Mixed SPL material of varying ratios have been identified on both Hydro Aluminium and Tomago Aluminium sites.*” The recyclable spent pot lining stored at the Hydro Smelter has been separated into first cut spent pot lining and second cut spent pot lining. Hydro does not store recyclable mixed spent pot lining.

In addition, the EA is unclear as to whether Weston Aluminium proposed to only receive mixed grade spent pot lining, or would mix the first cut and the second cut at their facility. As previously discussed, any treatment of first cut spent pot lining that does not use the calorific value of the first cut spent pot lining is not an efficient use of this material and results in significant greenhouse gas emissions.

3.3. Spent Pot Lining Characteristics

The EA describes spent pot lining as “dangerous and hazardous”, and notes the various chemical compounds that are found in spent pot lining. While page 14 the EA notes that it is “classified as dangerous good Class 4.3 in accordance with the Australian Dangerous Goods Code” (Table 11 (Preliminary Risk Screening - Gap Analysis) of the EA, however, did say “*Although First Cut SPL is considered a combustible material, it is not classified as Dangerous Goods and no significant risks are identified as a result of this change.*”), the EA fails to specifically address the reason that results in spent pot lining being deemed dangerous and the associated risks, and what the Weston Aluminium process actually does for the material to not be categorised as a Dangerous Good: it only notes that process results in the destruction of cyanide.

The EA also does not explain why the spent pot lining would be deemed hazardous waste under the Protection of the Environment Operations (Waste) Regulation 2014. While page 14 of the EA does make reference to the *Environmentally Hazardous Chemicals Act 1985* and the licence Weston Aluminium holds under this act, it does not make reference to the *Chemical Control Order in Relation To Aluminium Smelter Wastes Containing Fluoride and/or Cyanide* that the licence actually implements and the requirements of this order.

As discussed in **Section 3.1** of this letter, the EA also fails to explain how the Environment Operations (Waste) Regulation 2014 and the *Environmentally Hazardous Chemicals Act 1985* apply or relate to the process by-product.

In addition, the EA fails to adequately consider the different characteristics of first cut spent pot lining and second cut spent pot lining. While Table 10 of the EA shows the significant differences between the chemical characteristics of first cut spent pot lining and second cut spent pot lining (without referring to a source of this data), the EA does not acknowledge the additional environmental and handling controls that would be required for first cut spent pot lining.

This is reflected in a few sections of the EA:

- Page 9 of the EA notes that the processed spent pot lining would be removed from the furnace and cooled in a rotary cooler, which includes a water spray cooling system to assist in the final cooling of the product.
Spent pot lining is deemed a Dangerous Good as it is a substance which in contact with water can emit flammable gases (Division 4.3 of the Dangerous Goods Code). The EA makes no reference to this issue, how this risk is managed, or how this risk has been completely removed to allow water to be used without any additional environmental and safety controls.

- Table 11 of the EA (in the Hazards and Risks section) states “*Although First Cut SPL is considered a combustible material, it is not classified as Dangerous Goods and no significant risks are identified as a result of this change.*
Other composition differences between First and Second Cut SPL are not considered to result in additional hazards not already identified for Second Cut SPL.” Spent pot lining is classified as a Dangerous Good under Division 4.3 of the *Australian Code for the Transport of Dangerous Goods by Road & Rail* (2016). It is unclear why the EA has concluded that the addition of a combustible material (first cut spent pot lining) would not result in additional hazards that need to be considered and addressed.
- The EA fails to address the significant difference in carbon composition between first cut spent pot lining and second cut spent pot lining. As previously discussed, the EA and the Weston Aluminium process fail to acknowledge the potential fuel source that first cut spent pot lining is, and the significant greenhouse gas emissions from burning it.
The EA deems greenhouse gas emissions a very low risk (page 20) and says that greenhouse gas emissions would be comparable to those Weston Aluminium estimated in a 2012 EA. However that 2012 assessment only considered the processing of second cut spent pot lining, which has a significantly lower carbon composition, and is primarily focussed on the energy inputs to the treatment process, rather than any emissions from the spent pot lining itself.

Thermally treating the first cut spent pot lining, rather than using it as an alternative energy source (which is a viable option for untreated first cut spent pot lining), generates greenhouse gas emissions without a beneficial reuse, and significantly reduces the potential reuse opportunities for this material.

- As previously discussed, the EA does not acknowledge that uncrushed first cut spent pot lining is much harder and typically in larger pieces as compared to second cut spent pot lining. As such it requires different environmental controls and crushing techniques and equipment to second cut spent pot lining. This new equipment and techniques are not addressed in the EA, and therefore neither are the potential additional air quality and noise impacts.
- Through its experience in the handling and storage of spent pot lining at the Hydro Smelter, Hydro is aware that the key chemicals of environmental concern are leachable fluoride, leachable cyanide and sodium. The final levels of these chemicals in any process by-product are critical in making the material inert. Table 10 of the EA presents the representative composition of first cut and second cut spent pot lining. While free cyanide is presented, fluoride and sodium are not presented as separate chemicals, but rather as composites (sodium hydroxide, sodium fluoride, sodium aluminium fluoride and fluorspar). The levels of these chemicals in the untreated spent pot lining and the process by-product are not presented in the main body of the EA, but are only provided in an appendix to the Air Quality Impact Assessment (Appendix E of the EA). As key factors in determining the success of any spent pot lining processing option, these results should be included in the main body of the EA.

3.4. Air Quality Impact Assessment

As an adjoining landowner who is investigating the development of this land for residential, commercial, industrial, rural and conservation land, Hydro believes that the inputs to, and the conclusions of, the Air Quality Impact Assessment needs greater scrutiny and clarification.

Basis of Assessment

Hydro is concerned regarding the assumptions for air emissions and the process by-product characteristics that form the basis of the Air Quality Impact Assessment. These are based on limited trials and analysis of first cut spent pot lining, second cut spent pot lining, and mixed grade spent pot lining.

While it is acknowledged that the trials included varying ratios of spent pot lining, the EA (particularly the Air Quality Impact Assessment) failed to acknowledge the significant chemistry variation that can occur within

each spent pot lining grade. Hydro is therefore concerned that the “worst case” that Weston Aluminium has used in its assessment does not truly reflect the worst case.

Fluoride Emissions

Page 23 of the EA (Air Quality) presents data on Hydrogen fluoride (HF) concentrations. Page 22, however, notes the following:

“Table 6 presents ambient hydrogen fluoride (HF) ground level concentrations in the vicinity of the study area recorded between the cessation of smelter operation in October 2012 and 2014. Since the shutdown of Hydro Aluminium, the highest HF concentrations have been recorded at McLeod Road. The McLeod Road station is located in proximity (approximately 1km to the east) to the WA site, and Hydro Aluminium staff have indicated that the concentrations recorded at this station were influenced by WA’s emissions. As such, if ambient data from this station were used in the cumulative HF concentration calculations, the contribution from WA would likely be substantially overestimated. To avoid that overconservative situation, the ambient data used to calculate the total cumulative HF concentrations at receptors were the highest measured HF concentrations at any monitoring station other than McLeod Road, and as such the McLeod Road data was removed from the table.”

The McLeod Road monitoring station is located on Hydro Land. As such the dismissal of these results from the air quality assessment, and a lack of justification for the elevated levels at this station, are concerning to Hydro.

Clarification should be provided by Weston Aluminium as to why the use of the McLeod Road hydrogen fluoride data would lead to a “substantial overestimation” of Weston Aluminium’s contribution to the HF levels in the local area, and therefore removed from the table. As Hydro ceased production in September 2012 there are limited alternative contributors to airborne hydrogen fluoride in the Kurri Kurri/ Weston area.

Page 25 of the EA (Air Quality) presents data on the pollutant concentrations at two of the Weston Aluminium stacks during the 2011 and 2016 trials, including hydrogen fluoride. The table, however, includes the following note:

“Note that after visual inspection of the trial data, a potential outlier was identified in the fluoride data set. A review for statistical outliers using the Interquartile Range analysis method (IQR) was undertaken which confirmed that one of the values was outside the Upper Bound and was a recognised outlier. The value was therefore removed from the assessment calculations.”

Hydro is concerned that Weston Aluminium has not presented the actual result or a reason (technical or otherwise) for such a result, and has only undertaken a statistical analysis to justify its removal from the assessment as a “statistical outlier”. Hydro recommends that the result be provided and (if it is an elevated level) that a justification for the result be discussed. This may assist the justification of the conclusion that the result is a statistical outlier.

Emissions Assumptions

The EA and supporting Air Quality Impact Assessment note the following:

“The reports summarise the stack emission concentrations for various trials. The 2011 report summarises the results from two trial batches, the first with a First Cut: Second Cut SPL ratio of 0.48:0.52 (together with iron oxide, cullet and lime) and the second 100% Second Cut SPL. The 2016 report reviews four compliance testing events, with an approximate First Cut: Second Cut SPL ratio ranging from 5:95 to 95:5. For the purposes of this AQIA, the range of the two reports is considered appropriate to represent emissions of First Cut SPL as well as the various ratios in-between.”

Hydro has the following concerns:

- The assumption that visual assessment of the difference between first cut and second cut spent pot lining would be sufficient to determine the difference, and in turn determine the ratios. From its experience Hydro recommends that, unless the spent pot lining was supplied in the separate grades by the supplying aluminium smelter, laboratory analysis should be undertaken to confirm the grade. This in turn would provide greater confidence in the emission results.
- Weston Aluminium does not explain why a trial of 100% first cut spent pot lining was not undertaken, and why *“an approximate First Cut: Second Cut SPL ratio ranging from 5:95 to 95:5..... is considered appropriate to represent emissions of First Cut SPL”* (page 24 of the EA). If Weston Aluminium is proposing to process 100% first cut spent pot lining, the EA must consider the processing, emission results and by-product characteristics of 100% first cut spent pot lining.

4. OTHER ISSUES

4.1. Stakeholder Consultation

Page 14 (Section 4 Stakeholder Consultation) describes the stakeholder consultation that Weston Aluminium has previously undertaken, as well as that specifically undertaken as part of the EA. It also noted that Weston Aluminium will continue to engage with aluminium smelters.

As an adjoining land owner and an aluminium smelter identified in the EA as a potential supplier of spent pot lining, Hydro should have been consulted about this proposal prior to the EA being placed on exhibition. While Hydro and Weston Aluminium have been in consultation regarding the possibility of Weston Aluminium processing some of the spent pot lining stored at the Hydro Smelter, at no time was this proposal, or the inclusion of other references to Hydro and its personnel in the EA, raised during these discussions.

4.2. Infrastructure Requirements

Page 8 of the EA states that *“no changes to the existing operation would be required”*. This is also stated elsewhere; however Figure 3 of the EA shows a “Rotary Cooler (New)”. Clarification is therefore required as to whether new infrastructure is required, and for what purpose.

Given the chemical and physical differences between first cut spent pot lining and second cut spent pot lining (as discussed in Section 3.3 of this letter) Hydro would expect that there would be a requirement for new infrastructure, handling procedures and safety measures.

4.3. Smelter Contact Details

Hydro acknowledges that a letter was sent by the Department to the Smelter on 14 September 2016 regarding the exhibition of the EA, and another on 4 October 2016 advising of the extension to the exhibition period. Hydro requests that the Department updates its contact details for the Smelter to reflect the contact details of Hydro (VAW Kurri Kurri Pty Ltd no longer exists) and the signatory to this letter.

5. CONCLUSION

Hydro acknowledges that Weston Aluminium currently offers an option for the processing of second cut spent pot lining to enable recycling and that Weston wish to expand this capability to include first cut spent pot lining.

Hydro supports any project that directly reuses or facilitates the recycling of spent pot lining that is properly assessed and justified in accordance with applicable waste policies and environmental laws.

Hydro believes that additional information to that provided in the EA, and clarification of some of the information in the EA, is required to allow the department to adequately consider and determine the Modification Applications in accordance with applicable waste policies and environmental laws. This will also ensure that the community is better informed about Weston Aluminium's proposal, as well as the environmentally and economically sound reuse and processing alternatives that are available elsewhere in Australia and internationally.

Yours faithfully,
for Hydro Aluminium Kurri Kurri Pty Ltd

A handwritten signature in black ink, appearing to read 'Richard Brown', followed by a long horizontal flourish.

Richard Brown
Managing Director

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