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Director, Industry Assessments
Planning and Assessment Division
Department of Planning, Industry and Environment

31 August 2021

Via Major Projects Portal

Attention: Emma Barnett

Sell and Parker Kings Park Metal Recovery and Recycling Facility Expansion SSD 10396

EPA Advice on Submissions Report

Dear Mr Ritchie

Thank you for the request for advice from Public Authority Consultation (PAE-25418628), requesting the review by the NSW Environment Protection Authority (EPA) of the Submissions Report for the proposed Sell and Parker Metal Recovery and Recycling Facility Expansion (Application SSD10396) at 23-43 and 45 Tattersall Road, Kings Park (the **Premises**).

The EPA has reviewed the following documents:

- *Kings Park Metal Recovery and Recycling Facility Expansion Response to Submissions* – Arcadis – 2 August 2021 (the *RTS Main Body*); and
- *Appendix C Addendum Noise Impact Assessment* – Renzo Tonin and Associates – 10 June 2021;
- *Appendix D Supplementary Air Quality Assessment Information* – Northstar Air Quality and Ektimo reports of varied dates.

The *RTS Main Body*, *Addendum Noise Impact Assessment* and *Supplementary Air Quality Assessment Information* have not fully addressed the matters raised by the EPA in its submission dated the 21 October 2020. The EPA is unable to properly assess the potential environmental impact associated with the proposal or consider recommended conditions of consent prior to these documents being updated as detailed below.

Noise Impact Assessment

The EPA's submission on the Noise Impact Assessment that supported the proposal's exhibited Environmental Impact Statement is tabulated in the *RTS Main Body* (p.30) at *Table 4.2: Response to Government Agency submission – Environment Protection Authority*. Table 4.2 also includes the proponent's response to each point of the EPA's submission.

The EPA's detailed comment on the proponent's response is provided in Attachment 1. In summary, the EPA recommends that the proponent be required to revise the *Noise Impact Assessment* to include:

1. The prevailing noise environment for receivers in NCA 1B at an appropriate location further removed from Sunnyholt Road than 2 Anthony Street Blacktown;

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2. Identification of the continuous noise source as indicated by the night-time levels at 1 Comorta Close and a determination as to whether it is representative of the greater catchment;
3. Justification for the adoption of the “urban” rather than “suburban” residential noise amenity area for those areas zoned R2;
4. Indicate what wind speeds were used in the assessment;
5. An “objective assessment” of modifying factor adjustments outlined in the Noise Policy for Industry - Fact Sheet C, including consideration of feasible and reasonable mitigation to eliminate or mitigate identified annoying characteristics; and
6. Ensure the LAFmax events are quantified and considered in the assessment.

Air Quality Impact Assessment

The level and format of the information provided by the proponent in response to the EPA’s comments on the *Air Quality Impact Assessment (*AQIA) does not present clear and transparent information to enable an adequate assessment of the potential impacts of the proposal. There are specific key assessment issues previously raised by the EPA that have not been robustly addressed.

The EPA recommends the proponent be required to present a revised AQIA in its entirety that includes all the requested additional information and provides the appropriate context to interpret the new and/or changed information. Further detail in this regard is at Attachment 1. The EPA is willing to meet with the proponent’s consultant to discuss the information issues as they prepare any revised assessment.

If you have any questions about this request, please contact Damien Rose on 9995 5586 or via email at damien.rose@epa.nsw.gov.au .

Yours sincerely

MITCHELL BENNETT
Unit Head - Statutory Planning

Attachment 1:

Addendum Noise Impact Assessment

EPA EIS Issues (EPA letter DOC20/789099-6)	Proponent's Response	EPA Comment
There is uncertainty regarding the measured ambient noise levels, which are critical to establishing appropriate Project Noise Trigger Levels in accordance with the Noise Policy for Industry (NPfI) (EPA, 2017). The NIA has indicated ambient noise monitoring has not been undertaken as part of the assessment as COVID-19 conditions would likely influence the results due to reduced transport and industrial activity despite EPA observations on 08 October 2020 that the majority of surrounding industrial Premises and mechanical sales/repairs Premises were all operational during this time period. The NIA has therefore relied upon ambient noise monitoring undertaken at two locations generally to the east of the Premises on two occasions several years ago. The original monitoring was undertaken in 2014 with additional synchronised short-term noise monitoring undertaken in 2015 to estimate ambient noise conditions at residential receiver areas located to the north and west of the Premises at the long-term monitoring Premises (east) and representative locations to the west and north to establish a correction factor between the locations. This correction factor has been used to estimate long term ambient noise conditions at residential locations to the north and west of the Premises. The estimated results are inconsistent with long term monitoring results to the west of the premise undertaken as part of SSD 8375 for the Pick n Payless Metal Recovery and Recycling Facility proposal. The proponent must review and revise as appropriate (including undertaking additional noise monitoring) the estimated ambient noise levels for residential receiver locations to the north and west of the Premises and consider, where possible, other sources of ambient noise data including, but not necessarily limited to, SSD 8375 (note a revised NIA has been	The Supplementary Noise and Vibration Impact Assessment (refer to Appendix C) has included additional long term noise monitoring at four locations between 11 February and 24 February 2021. This long-term noise monitoring was used to determine the Rating Background Levels (RBL) and representative ambient noise levels in accordance with the NSW 'Noise Policy for Industry' (NPfI). Notwithstanding, it is not anticipated the COVID-19 pandemic will result in any long term impacts to ambient noise levels. The assessment concludes that predicted noise levels at all receivers comply with relevant project noise trigger levels without any additional noise mitigation measures. Nonetheless, as part of the commitment to continuous improvement and to reflect comments provided within community submissions, Sell & Parker propose to incorporate additional mitigation for noise generated at the Proposal Site. Sell & Parker will raise around 70 linear meters of the existing south eastern noise wall (located on the south eastern boundary of the Proposal Site) by approximately 2.2 metres to provide additional screening to sensitive receivers in the priority area to the east of the Proposal Site. This has been committed to as a mitigation measure as described in Section 6 of this RtS.	The revised NIA presents the results of additional background monitoring at 189 Sunnyholt Road Blacktown (NCA 1A); 2 Anthony Street Blacktown (NCA 1B); 19 Camorta Close Kings Park (NCA 2); and, 1 Chedley Place Marayong (NCA 3). Further justification is required to demonstrate that 2 Anthony Street Blacktown is representative of receivers further east of Sunnyholt Road. For example, moving 100-150m further east may significantly reduce the effect of Sunnyholt Road resulting in potentially reduced RBLs and hence intrusive criteria. The impact assessment should consider the prevailing noise environment for receivers in NCA 1B at a location further removed from Sunnyholt Road. The EPA notes that Anthony Street increases in height further west which may also affect exposure to Sell and Parker operations. The night-time levels at 1 Comorta Close appear to be influenced by a continuous noise source as evidenced by the convergence of acoustic descriptors at a level of about 38dB. The source needs to be identified and a determination made as to whether it is representative of the greater catchment.

supplied as part of the proponents Response to Submissions for SSD 8375).		
The NIA describes long term monitoring location "L1" as follows: "*The noise monitor was located in the 'free-field'. The noise monitoring location is considered representative of residential receiver locations along Sunnyholt Road*"; and the nearby location L2 as follows: "*The noise monitor was located in the 'free-field'. The noise monitoring location was supplementary for residential receiver locations along Sunnyholt Road*". The Rating Background Level (RBL) of noise for location L2 is some 5dB lower than for location L1 at night. As L2 is noted as being "*supplementary for residential receiver locations along Sunnyholt Road*", the EPA is unsure as to why the RBL at L2 was not used to inform the intrusiveness level for residential receivers to the east of the Premises. The EPA's position is that that the RBL at L2 should be adopted for the intrusiveness level.	The original assessment presented in the EIS was conducted in 2014, when the Proposal Site did not include any night time activities. L1 was selected as the representative receiver for Sunnyholt Road as it had the lower (and more conservative) background noise levels for the operational periods at that time. For consistency, the assessment of noise levels for night time activities also therefore used background levels at L1. The Supplementary Noise and Vibration Impact Assessment (refer to Appendix C) has included additional long term noise monitoring at four locations between 11 February and 24 February 2021. Each location was selected in order to be representative of receiver locations in specific noise catchment areas (NCA). L1 is considered representative of receiver locations within NCA1A and was located in the front yard of 187 Sunnyholt Road Blacktown. L2 is considered representative of receiver locations within NCA1B and was located in the side yard with no line of sight to Sunnyholt Road at 2 Anthony Street Blacktown (refer to Appendix C). Intrusiveness levels for receiver locations within NCA1B are now based on RBL at L2.	The noise monitoring and assessment conducted at 2 Anthony Street Blacktown is unlikely to be representative of receivers further to the east (i.e. NCA 1B) given they are further removed from Sunnyholt Road and at higher elevations thereby potentially increasing the exposure (line of sight) to Sell and Parker.
There is uncertainty in the meteorological conditions being appropriately considered in the assessment which could lead to underestimating operational noise impacts. The significance of wind vectors has been undertaken only to nominated receiver locations. However, these receiver locations are in some circumstances representative of groups (catchments) of receiver locations, especially in the case of residential receivers to the west, north and east of the Premises. The NIA appropriately acknowledges in Section 4.1 "*Furthermore, representative locations may be established in the case of multiple receivers as it is usually impractical to carry out measurements at all locations surrounding a Premises*". This fact needs to be considered in terms of relevant meteorological conditions.	As described in Section 5 of Appendix H of the EIS (Noise Impact Assessment), site specific meteorological conditions were considered in accordance with the NPfI. The Supplementary Noise and Vibration Impact Assessment (refer to Appendix C) has included additional consideration of meteorological conditions. The NPfI specifies a procedure for assessing the significance of wind effects, and a default wind speed to be used in the assessment where these effects are found to be significant. The procedure requires that wind effects be assessed where wind is a feature of the area. In the Supplementary Noise and Vibration Impact Assessment, the meteorological conditions analysis considered 16 compass point wind directions (as specified in the NPfI), rather than source to representative receiver directions only.	The further assessment of meteorological conditions is noted and accepted. Any limits for this development should be required to be met under NPfI noise enhancing meteorological conditions with scalar wind parameters.

For example, the assessment has determined that light winds are relevant for receiver R6 (located directly to the east of the Premises). However, the assessment has determined that light winds are not relevant for receiver R1 (located to the south east of the Premises). R1 is representative of residential receiver locations, including residential receivers directly to the east of the Premises, and therefore some receiver in this "catchment" will potentially be subject to meteorological enhancement from light winds. The proponent must, where a single representative receiver location has been selected to represent a "catchment" of receiver locations, undertake a conservative assessment of meteorological effects and consider worst case source to receiver wind direction in terms of meteorological effects to be applied to the noise modelling.	The assessment concludes that as there are greater than 30% occurrence of winds between 0.5 m/s and 3 m/s for certain wind direction scenarios, these are prevailing wind conditions in accordance with the NPfI. Appendix C outlines the meteorological assessment conditions for each time period used for the assessment of potential noise impacts. When including prevailing meteorological conditions, the assessment concludes that noise emissions for all receivers comply with relevant project noise trigger levels without any additional noise mitigation measures. Nonetheless, as part of the commitment to continuous improvement and to reflect comments provided within community submissions, Sell & Parker propose to incorporate additional mitigation for noise generated at the Proposal site. Sell & Parker will raise around 70 linear meters of the existing south eastern noise wall (located on the south eastern boundary of the Proposal Site) by approximately 2.2 metres to provide additional screening to sensitive receivers in the priority area to the east of the Proposal Site. This has been committed to as a mitigation measure as described in Section 6 of this RtS.	
There is uncertainty with the noise data used to inform the Project Noise Trigger Levels and sleep disturbance criteria. The EPA does not concur with the Project Noise Trigger Levels and sleep disturbance criteria presented in the assessment due to the issues raised with the characterisation of the existing acoustic environment in the area as outlined in the comments above. The criteria presented in the NIA, Section 6 needs to be reviewed in terms of the issues raised. The proponent must review and confirm, or amend if and as appropriate, the noise data used to inform the Project Noise Trigger Levels and sleep disturbance criteria taking into account the EPA's comments above.	The Supplementary Noise and Vibration Impact Assessment (refer to Appendix C) has included additional long term noise monitoring at four locations between 11 February and 24 February 2021. This long-term noise monitoring was used to determine the Rating Background Levels (RBL) and representative ambient noise levels in accordance with the NSW 'Noise Policy for Industry' (NPfI). The project noise trigger Levels and sleep disturbance criteria have been updated based on the more recent monitoring data. In consideration of the updated project noise trigger Levels and sleep disturbance criteria, including prevailing meteorological conditions, noise emissions for all receivers comply with relevant project noise trigger levels without any additional noise mitigation measures. Nonetheless, as part of the commitment to continuous improvement and to reflect comments provided within community submissions, Sell &	See comments above regarding concerns about the background noise monitoring undertaken for NCA 1B and NCA 2. Additionally, the project amenity noise level derived in the Supplementary NIA adopts "urban" residential noise amenity area. The zoning of all residential locations is R2 which according to the NPfI, Table 2.3 would attract a "suburban" residential noise amenity area. The selection of "urban" needs to be justified. Any justification needs to consider ambient noise levels and sources, and in the case of NCA1B the ambient environment of locations further removed from Sunnyholt Road (i.e. not 2 Anthony Street).

	Parker propose to incorporate additional mitigation for noise generated at the Proposal Site. Sell & Parker will raise around 70 linear meters of the existing south eastern noise wall (located on the south eastern boundary of the Proposal Site) by approximately 2.2 metres to provide additional screening to sensitive receivers in the priority area to the east of the Proposal Site. This has been committed to as a mitigation measure as described in Section 6 of this RtS.	
There is uncertainty in the calculation methodology and assumptions used to predict operational noise. The NIA indicates that noise predictions were undertaken using CadnaA utilising the ISO9613 standard. The noise prediction model also appears to have nominated "soft" ground between the source and receiver (NIA, Section 7.2). This is not suitable when considering a paved urban environment and needs to be reviewed. The proponent must detail, explain and justify the method used to determine "neutral conditions" and "prevailing wind conditions" using the ISO standard given that the ISO standard does not have the ability, in isolation, to consider a range of meteorological conditions. The proponent must revise the nominated "soft" ground between the source and receiver to a more suitable option when consider paved urban environments.	The prevailing wind conditions as described in the Noise Impact Assessment (Appendix H of the EIS) were determined using the CONCAWE module in the modified ISO9613 implementation in CadnaA. It is noted that this is considered conservative as the ISO standard already incorporates a mild downwind noise enhancing condition. The noise model for the Supplementary Noise and Vibration Impact Assessment (Appendix C of this RtS) has been updated to reflect "hard" ground between the sound and receiver. With updates to the model noise emissions for all receivers continue to comply with relevant project noise criteria without any additional noise mitigation measures.	The EPA notes that the ISO9613 prediction methodology has been augmented with CONCAWE meteorological module and is a conservative approach. The EPA accepts this approach, noting however that in situations where limits above PNTLs are being sought, this approach may not be acceptable. The use of hard ground conditions in the model is acknowledged and accepted. The supplementary NIA does not indicate what wind speeds were used in the assessment. This needs to be identified.
The NIA notes under Section 7.2 that: "*On the basis of noise measurements undertaken at Sell & Parker's Kings Park Premises and other similar metal recycling facilities, and after accounting for acoustic shielding provided by intervening structures between the Premises and both residential and industrial receptors, the character of noise as perceived at the receiver locations is not tonal, impulsive or low frequency. Therefore, it is not necessary to apply modifying factors to correct for the character of the noise*". The EPA's position is that it does not concur with this statement without an objective assessment that demonstrates that the factors outlined in the NPfI, Fact Sheet C have been considered.	Additional attended on site noise measurements were undertaken on Monday, 8th March 2021 to capture noise from existing plant and equipment on site and to undertake verification of the noise model with these noise sources. The additional measurements were taken of individual plant items as well as of activities / processes such as hammer milling and metal shearing, where a number of plant items were operating within an area concurrently and completing typical routine / cycle. An analysis of intermittent noise was undertaken for the night time period only (plant items used during the night time period are only for maintenance and cleaning activities) (refer to Appendix C of this RtS). The analysis concludes that the character of noise as	The RtS and Supplementary Noise and Vibration Assessment does not contain an "objective assessment" to demonstrate that modifying factors adjustments are not relevant. The EPA notes that the assessment of night-time modifying factors does not appear to include activities undertaken during the morning shoulder period. This is required. An objective assessment of modifying factor adjustments outlined in the NPfI, Fact Sheet C is required to be undertaken and presented in the noise impacts assessment. This assessment should also include consideration of feasible and reasonable mitigation to eliminate or mitigate and annoying characteristics identified.

This is especially relevant given that the Premises is operational, and measurements can be used to assess the potential for annoying noise characteristics. This should include the intermittency test for activities undertaken during the night-time period. Furthermore, on 08 October 2020, EPA Officers did identify intermittent metal processing noises from the Premises at Anthony Street, Blacktown.	perceived at receiver locations from night time activities (such as the use of forklift, hand tools, pressure hose and crane) is not considered to be intermittent, and it is not necessary to apply modifying factors to correct for the character of the noise.	
The NIA does not include justification that the selected receiver locations used in the assessment are, or are representative of, the worst affected receiver in the catchment. The proponent must identify the catchment that the residential receiver locations are representative of, and then justify why the location represents the worst affected location in the catchment. The presentation of noise contour plots would assist in this determination where factors including relative ground elevation and exposure pathways are considered.	Operational noise contours have been provided in (Supplementary Noise and Vibration Impact Assessment (Appendix C of this RtS) for worst case wind conditions and has included modelling of surrounding built form. As the existing acoustic environment surrounding the Proposal Site varies, noise sensitive receivers have been grouped into noise catchment areas based on areas with similar acoustic environments. Receiver locations have been selected as being potentially the most noise affected by the Proposal within each identified noise catchment area.	The potentially most affected location is not simply the location with the highest noise level from the development under consideration. It is the location that has the greatest impact which is a measure of both the assessment criteria and noise level from the development. The EPA's principal area of concern (as outlined above) remains whether monitoring at 2 Anthony Street is representative of receivers further to the east as the impact of Sunnyholt Road would decrease (i.e. potentially lower RBLs and hence assessment criteria) however similar or higher levels from the development would occur due to increase exposure due to elevation.
The assessment of sleep disturbance levels has presumably used the LAmax sound power level presented in the NIA at Table 7.1. LAmax noise levels of concern from resource recovery facilities often relate to impact noise from delivery, handling, processing of materials including dropping bins, dropping material into process hoppers etc. The proponent must undertake and present an assessment of existing premises activities and related LAmax noise levels involving material handling to ensure that the LAmax sound power levels considered in the assessment adequately cater for material handling noise. The proponent must include an explanation to justify why sound power levels for plant and equipment used in the assessment will not increase as part of the increase throughput of the Premises. The proponent must objectively account for materials delivery, handling and processing as a noise source for all noise modelling scenarios.	Attended noise measurements were undertaken on site for the Supplementary Noise and Vibration Impact Assessment (Appendix C of this RtS). A summary of plant and equipment and relevant sound power levels as updated in the Supplementary Noise and Vibration Impact Assessment is provided in Appendix C. The presented plant and equipment levels are the sound power levels for the plant and equipment operating at maximum output/capacity. As outlined in Section 1.1 of this RtS, the Proposal Site has the capacity to accommodate the increased throughput and will not require any physical works or change to the nature of operations. There will be no changes to the nature or types of equipment used and the presented plant and equipment levels are the sound power levels for the plant and equipment operating at maximum output/capacity. As such the sound power levels will not change. A summary of noise sources including materials delivery and handling and processing for the Proposal, and relevant sound	The supplementary NIA at s.7.1.1 indicates that LAeq,15min, dB sound power levels considered "typical / routine cycle". The assessment needs to identify whether sound power levels were adjusted to reflect the plant's operational time over a 15 minute period. If so, how does this account for potential for longer operational times with the increased throughput proposed. The supplementary NIA at Table 7.2 – '**LAmax Sound power level of proposed activities, dB(A)'** considers Hammer Milling and Metal Shearing under general operations. However other activities occurring concurrently with these activities have also been mentioned. What was the cause of the nominated sound power levels and how was the causation event identified and quantified? How were distances to causation events determined? It is essential that the LAFmax events are quantified and considered in the assessment.

The proponent must undertake noise model verification / calibration to demonstrate the accuracy of the noise model. This is particularly relevant (and possible) when dealing with an existing and operational Premises.	power levels, is provided in Appendix C. These noise sources have been included in the noise modelling for the Supplementary Noise and Vibration Impact Assessment. A verification check for the noise model was undertaken during the recent attended noise measurements on site and was conducted at the boundary of the existing site. The verification check included operation of all daytime plant items listed in the addendum report with the exception of the pre-shredder and one shear, which were not in operation during the site visit. Measured noise levels were found to be within 1dB of the modelling results, confirming the veracity of the noise model.	
Additional comments: Since 25 June 2020, the EPA has received 18 complaints of excessive noise being emitted from the Premises from residents at various locations near to the Premises. The EPA recommends that the proponent carefully outline the noise mitigation measures committed to under existing approvals and whether that mitigation has been appropriately deployed as well as any other planned noise mitigation measures for the Premises.	The results of the Supplementary Noise and Vibration Impact Assessment (refer to Appendix C of this RtS) indicate that noise emissions associated with the Proposal for all receivers comply with relevant project noise trigger levels without any additional noise mitigation measures. Nonetheless, as part of the commitment to continuous improvement and to reflect comments provided within community submissions, Sell & Parker propose to incorporate additional mitigation for noise generated at the Proposal Site. Sell & Parker will raise around 70 linear meters of the existing south eastern noise wall (located on the south eastern boundary of the Proposal Site) by approximately 2.2 metres to provide additional screening to sensitive receivers in the priority area to the east of the Proposal Site. It is understood that the identified complaints were largely made by residents from the area to the south east of the Proposal Site. This has been committed to as a mitigation measure as described in Section 6 of this RtS.	Noted.

Air Quality Assessment Information

Response to submissions does not provide a clear and transparent assessment

The Supplementary Air Quality Assessment (Northstar) provided as Appendix D of the Response to Submissions (Arcadis, August 2021) has re-estimated emissions and remodelled impacts, however, this revised information has only been provided as data tables which have not been clearly explained or cross-referenced. As such, the EPA cannot provide detailed comments on the adequacy of the response or determine if conditions of approval can be provided. Further, the Response to submission includes two pieces of information from separate air quality consultants. The two pieces of correspondence provide some conflicting information (i.e. modelled emission rates).

The EPA recommends the proponent presents a revised AQIA in its entirety that includes all the requested additional information and provides the appropriate context to interpret the new and/or changed information.

Key assessment issues that have not been robustly addressed

An initial review of the information provided has identified some specific and key issues that remain outstanding and that need to be clearly and adequately addressed in a revised AQIA. These include, but are not limited to:

- the emissions inventory includes additional emissions sources and changes in control factors and assumptions that have not been explained or justified. An additional source that was stated to have negligible emissions in the original AQIA is estimated to be a significant source in the Supplementary Air Quality Assessment.
- an adequate assessment of cumulative impacts at industrial and commercial receptors. The Response to Submissions has labelled the receptors R10-R19 as fence-line despite the original AQIA identifying them as industrial.
- Although the adequate assessment of industrial and commercial receptors has not been provided, the incremental impacts in the original AQIA are significant at nearby industrial and commercial receptors. The original AQIA and Supplementary Air Quality Assessment has not undertaken a detailed and robust benchmarking of all mitigation and management measures against best practice to demonstrate that all reasonable and feasible measures for management of emissions is proposed and that offsite impacts can be managed.
- The original AQIA and *Supplementary Air Quality Assessment* indicates that onsite meteorological and ambient air monitoring is undertaken onsite for day-to-day management of dust control. Yet there is no information about the management control measures including reactive measures and the specific triggers and actions to demonstrate that any reactive management measures proposed can manage offsite impacts