



Technical Note

Title:	EAF Project - Acoustic Note Review RSKA Response		
Client:	Tata Steel UK Limited		
Reference:	2062419-RSKA-TN-008-(02)		
Date:	18 June 2025		
Prepared:	Alex West	Approved:	Dan Clare

1 Introduction

1.1 Construction Noise and Vibration Management Plan Review

The Construction Noise and Vibration Management Plan (2062419-RSKA-CVNMP-002-(02)) was submitted on 20th May 2025. The CNVMP was prepared to satisfy the Pre-Commencement Conditions (for full and outline permissions 10 and 49 respectively, from planning permission reference P2024/0711).

Red Twin Limited (Red Twin) has undertaken a technical review of the document in reference to both condition 10 and 11 of the planning permission for the EAF Project. The review is provided in two documents, each referring to condition 10 (N1426.2 V1) and 11 (N1426.3 V1), respectively. Both documents were received by RSK Acoustics (RSKA) on June 5 2025. The below provides a summary of the comments raised within the Red Twin review and the RSKA response.

We highlight that the most up to date version of the document is Construction Noise and Vibration Management Plan (2062419-RSKA-CVNMP-002-(03)). Minor updates were made to the document prior to formal submission in the discharge of condition application on 23 May 2025. Some of the comments identified by Red Twin are addressed with this update. These are picked up in the table below for ease of reference.

2 Summary Report Comments – N1426.2 V1 – Project Cronus

2.1 Acoustic Review Note – Condition 10

The below table provides the comments raised within the acoustic review note and the RSKA response.

Red Twin Limited Comment	RSKA Comment
2.2 – Comprehensive list of proposed facilities that expand on previous proposals giving a more definitive list of facilities, the areas they are to be located and which part of the development they are associated with.	No comment

Red Twin Limited Comment	RSKA Comment
2.3 – Table 2.3 does not include the 2 previously identified Quiet Areas i.e. Vivian Park (R8) and Talbot Memorial Park (R9). No justification for their omission has been provided. The previously identified 7 No receivers remain, indicating there are no changes to the receivers as a result of the developed proposals.	Neither are included due to the low impact at the quiet area receptors. These were not included in the construction assessment presented in the ES. These can be included but will not be in line with the ES approach and will show no impact due to their location. These were only included as part of the operational phase and will be referenced in the forthcoming Operational Noise Vibration Management Plan (as required by Condition 58 on the EAF planning permission).
4.1 – Construction works are proposed to be undertaken during the time periods set out in Table 4.1. All works, with the exception of demolition, are proposed to take place both inside and outside the core hours defined as Monday – Friday 07:00 – 19:00 and Saturdays 07:00 – 13:00. The assessments prior to this point have been carried out on the basis that construction works will only be carried out during core hours as stated in 7.4.27 of the Environmental Statement (2024). Works are now proposed to be carried out between 07:00 until 23:00 any day of the week including Sundays and bank holidays, with some works (i.e. Task 6) taking place throughout the night-time period also. The proposal does therefore not comply with condition 10.	Para 7.4.27 states that “7.4.27 Information related to the construction programme, phasing and specific plant items has not been provided. A detailed construction noise and vibration assessment will be required when this information becomes available. The assessment is based on construction activities taking place during daytime (07.00–19.00 Monday to Friday, 07.00–13.00 Saturday) only with no work on Sundays or Bank Holidays. Further detailed assessments will be required if evening or night-time operation is expected. It is assumed that this will be secured through a suitably worded planning condition.” The assessment provided within the ES was based on core hour working only but allowed for the inclusion of evening and night-time operations if further detailed assessment was provided. Condition 10 requires a detailed CNVA as stated in para 7.4.27. It does not provide any limitation to the working hours, so long as a detailed CNVA is provided. It is agreed with Officers at NPT that the CNVA is the mechanism to confirm the agreed working hours. The report is set out on this basis.
4.2.4 – Distance to receivers and low vibration risk noted and is considered a reasonable conclusion. However, monitoring should be undertaken should there be changes to the proposals or complaints received.	Noted.
5.4 – Table 5.2 provides a detailed list of tasks. It is noted that the areas in which the tasks are to be carried out is ‘assumed’. This introduces some risk as it may transpire that the areas are different once works commence. Can there be further investigations to ensure more certainty in the areas of each task?	Confirmation to the exact areas each task will operate in can be sought from the Principal Contractor. This may need to be undertaken at a later stage once detailed methodology is prepared, or Section 61 application process accepted to manage change accepted.



Red Twin Limited Comment	RSKA Comment
The piling process is likely to be one of the noisiest construction activities and it is noted that there may be periods of time where steel sheet impact piling is required which may elevate instantaneous noise levels, and would also introduce elevated levels of vibration. This activity is proposed to be restricted to daytime periods only. Table 5.2 states that the piling methodology will be communicated to the LPA <i>'once the final construction methodology has been defined'</i> .	Noted.
5.5 – This section states that 'specific information relating to the programme of construction activities is not currently available'. However, condition 10 requires the final construction programme to be fully considered prior to works commencing. It is acknowledged on a scheme of this size that full details may not be known or are likely to change / deviate as the programme develops. However, to discharge the condition as it is written requires a final construction programme to be submitted upfront. It may be, however, that this can be dealt with via the submission of Section 61 applications.	The programme provided is up to date as of the date of submission. As is the case with projects of this scale, Tata need to retain flexibility in the final works programme to deliver the project. Any significant changes in programme can be made via a re-discharge of the condition and/or (more likely) Section 61 applications. This is the preferred approach and is common for this scale of development.
Table 5.3 is included twice. However, the sound power level estimates and periods are considered reasonable and representative of each task.	Noted.
Tables 6.2, 6.3, 6.4 and 6.5 outline the predicted construction noise at each of the 7 receivers. In all cases (core hours, evenings, weekends, night-time) the noise levels at the receivers fall below the trigger thresholds set out in BS5228 (2014) with the exception of R6 which is exceeded in all cases. However, justification and contextual analysis is provided which I am of the opinion, is satisfactory and should not be a cause for concern as the levels are below previous baseline monitoring levels and LAFmax levels also exceed the threshold pre-development for the reasons discussed in 3.2.2.	Noted.
6.4 – Low vibrations levels predicted, falling within the threshold levels. No further comment.	Noted.



Red Twin Limited Comment	RSKA Comment
7.2 – The 6 No suggested inclusions for community notification are considered suitable. However, how specifically will the community engagement be implemented e.g. which of the methods stated will be used? What is the extent of the ‘community’? How will email addresses be obtained? How will the project website be advertised?	Section 7.2 of the CNVMP summarises the extensive community engagement works undertaken by Tata on this project. The project website has been live for approximately 12 months. Tata updates the website to communicate key project milestones and will continue to do so throughout the construction period. Community newsletters are issued quarterly by Tata. This will include updates regarding the project. Site notices will be displayed on the boundary, as required by law. The website will be the primary forum for provision of key construction information, including the project overview, commencement, working hours and duration of works. The CNVMP, CEMP and DMS include co-ordinated mitigation measures to best manage the construction process at the site. Tata maintains a comprehensive monitoring network and complaints helpline and has done so for many years. This will continue to be the case during the construction period for the project.
7.3.1 – Noise control BPMs are broad and are considered applicable to the specific project. It is taken in good faith that as many of these as possible are incorporated into everyday activities to minimise excessive noise from the site.	Noted.
7.3.2 – See 7.3.1.	Noted.
7.3.6 – Unplanned overruns and LPA notifications (LPA phone number and contact required) are noted and considered satisfactory. This, however, is on the basis that the LA accepts the proposed construction hours being far more extensive than initial assessments allowed for.	Noted. See response to 4.1
8.1.1 - It is proposed that the contractor is to have the option of submitting S61 applications for all construction activities that may generate a significant noise / vibration effect and or activities to be undertaken outside of agreed construction working hours. This process could also capture changes in working method or procedure, as discussed in 5.5. I am of the opinion that in the event of such changes, a S61 application would be appropriate, thereby alleviating concerns in 5.5.	Noted.
8.1.2 – The proposed content of the potential S61 applications is considered appropriate.	Noted.
9 - A comprehensive complaints handling procedure is proposed and considered suitable.	Noted.



Red Twin Limited Comment	RSKA Comment
10 – Monitoring is proposed on a continuous or an ad-hoc basis. In addition to the 15 mins parameters proposed, the equipment should also include measurements of tonality and impulsivity, and character corrections to be incorporated into the monitoring analysis.	The construction noise assessment is undertaken in line with the appropriate British Standard, namely BS 5228-1:2009+A1:2014. There's no requirement within this standard to apply any character corrections. Character corrections apply to operational noise only.
I would recommend continuous noise monitoring is undertaken on-site to demonstrate continued compliance with trigger thresholds. I am in agreement with the proposed on-site monitoring location parameters. Off-site monitoring is proposed to take place on an ad-hoc basis in response to complaints, which is appropriate.	Continuous on-site monitoring is proposed as part of the CNVMP as per 2062419-RSKA-CVNMP-002-(03).
It is important to ensure that the monitoring results are continually compared with the predicted results from initial assessment and the construction noise thresholds. Therefore, I would recommend results are logged and submitted to the LPA on a monthly basis for monitoring and compliance procedures.	The initial assessment is now superseded by the assessment provided within the CNVMP. Any comparison of noise levels is required to be undertaken against the trigger thresholds identified in accordance with the ABC method from BS 5228-1:2009+A1:2014. Where Section 61 applications are submitted and approved, any monitoring at sensitive receptor locations should be compared with the consented limits contained within the S61 application.
I'd recommend further discussions take place to agree suitable on-site and off-site monitoring locations.	Agreed. Approximate locations of the proposed on-site are provided in Table 2. Proposed off-site monitoring locations are proposed to be equivalent to the assessment locations provided within the ES and the CNVMP. Reproduced within Table 3. Off-site monitoring to be undertaken at the proposed assessment locations or at a suitable representative location based on the professional judgement of the individual undertaking the attended monitoring. Off-site monitoring is likely to be facilitated through attended short term noise monitoring.
10.2 – Due to the low levels of vibration expected at the receivers, vibration monitoring is proposed on ad-hoc basis in response to complaints received. This is considered appropriate.	Noted.

Table 1 *Technical review comments from N1426.2 V1 and RSKA response*



NSR Ref.	Name	Title	X (Easting)	Y (Northing)
N/A	Lock Gates	Point A	275542	188657
R1	Penrhyn South Curve	Point B	277423	188445
R2	Visitor Centre	Point C	277673	187673
R3	Near Canteen	Point D	278053	187190

Table 2 On-site monitoring locations

NSR Ref.	Description	X (Easting)	Y (Northing)
R1	Residential properties at West End	277127	188899
R2	Residential properties at Prince Street	277641	188331
R3	Residential properties at Brynhyfryd Road	278365	187088
R4	Residential properties at Longland Lane	279273	186115
R5	Residential properties at Eglwys Nunydd	280190	184858

Table 3 Off-site monitoring locations

3 Summary Report Comments – N1426.3 V1 – Project Cronus

3.1 Acoustic Review Note – Condition 11

The below table provides the comments raised within the acoustic review note N1426.3 V1 and the RSKA response.

Red Twin Limited Comment	RSKA Comment
2.1.1 – An overarching sequence of construction is provided that stipulates a qualitative description of the sequence of works. Piling is identified in the CNVA as being one of the noisiest processes to be undertaken during construction. The Table in 2.1.2 indicates 1350 No CFA piles and 2400 PCC piles are to be incorporated into the project. No site-specific mitigation measures are proposed in relation to the piling works within the CEMP. However, it is stated within section 6.3 of the Piling Risk Assessment (2547r1d0425 - April 2025) that 'mitigation measures for reducing the noise impact of {PCC} piling will be adopted....including noise dampening at the hammer or pile head during construction. It is unclear if such mitigation is incorporated into the noise emissions that are provided in the CNVA, or whether such mitigation would result in an improvement above that assessed in terms of noise emissions.	All piling activities identified within the CNVA assessment achieve the noise trigger thresholds identified in accordance with BS 5228-1:2009+A1:2014. Based on this, there is no need for additional specific mitigation in order to mitigate potential significant adverse effects from the piling activity. Any mitigation measures applied to the piling activities, irrespective of the methods applied, are considered as optional from a noise impact point of view and would only enhance the BPM measures in place on the site.



Red Twin Limited Comment	RSKA Comment
It should be noted that Section 6.3 of the Piling Risk Assessment states that piling works will be limited to the approved working hours which are 07:00 – 19:00 Mon-Fri and 07:00 – 13:00 Sat. However, the CNVA proposes expanded construction operational hours, with works taking place throughout the days, evenings and weekends, including some night-time operations. This issue is also highlighted in my review of the CNVA and needs further clarification.	As shown in Table 4-1 of the CNVMP, no piling works are proposed at night-time. As per the above response, all piling activities identified within the CNVA assessment achieve the noise trigger thresholds identified in accordance with BS 5228-1:2009+A1:2014. Based on this, there is no need for additional specific mitigation in order to mitigate potential significant adverse effects from the piling activity.
2.2.3(a) sets out the noise monitoring strategy which is considered comprehensive and includes appropriate parameters in which to satisfactorily monitor noise during the construction stages. Crucially, the monitors are to include modems to allow for remote monitoring and text alerts if actions levels are exceeded. I would recommend the triggers are set below the exceedance level to allow for action to be taken prior to an exceedance taking place.	Agreed. Due to the distance from the on-site location to the sensitive receptor locations, it is considered that the application of the noise trigger thresholds + 10 dB identified within the CNVMP for each of the on-site monitoring locations will allow for early identification of potential noise threshold exceedances. Table 5 provides an overview of the proposed trigger thresholds that would apply at each on-site monitoring location. Justification of the + 10 dB above the noise threshold is appropriate due to the relative distance between the construction working areas and the residential receptor locations (e.g. sensitive receptors are all > 500 m from the nearest working areas). Regarding the trigger threshold criterion, these would be assessed using time-averaged noise over the given assessment period (e.g. $L_{Aeq, 12 \text{ hour}}$ during weekday core hours), not instantaneous measurements. This means: • Short-term exceedances during individual activities would not automatically constitute a non-compliance • During the daytime, the 12-hour average can remain compliant even if hourly periods exceed the thresholds • During the night-time, thresholds are time averaged over a 1-hour period. The above trigger thresholds would allow for a traffic light system of threshold exceedance investigation to be put in place. This would include the following actions by the environmental manager as shown in Table 6. It is noted that, due to the potential for variation in construction activity location relative to the monitoring positions, adjustment of these trigger thresholds may be required once working areas and construction programme are developed further. Any change in the on-site trigger thresholds along with appropriate technical justification will be communicated and agreed with Neath Port Talbot.



Red Twin Limited Comment	RSKA Comment
Noise monitoring is also proposed when undertaking noisy operations during demolition works as stated in the Demolition Method Statement, with concrete breaking using typical BROKK equipment being identified as a high noise activity. It is also proposed within the DMS that noise screens will be used where practicable, and noise exclusion zones will be set up i.e. fencing and signage. Such steps are considered appropriate.	Noted.
2.2.3(b) sets out the vibration monitoring strategy which is considered sufficient.	Noted.
The DMS states that no structural monitoring measures are deemed necessary (other than in response to complaints as discussed in the CNVA) but individual vibration exposure is to be managed by a vibration risk assessment and exposure monitoring.	Noted.
It is noted that the noise monitoring strategy does not allow for the provision of a neighbourhood liaison hotline number, whereas the vibration strategy does. I would recommend the hotline is introduced and retained for noise monitoring also.	Noted. Details of community engagement, complaint notification and investigation is provided in the CNVMP.
2.5.1 Noise control BPMs are provided and whilst, broad are considered applicable to the specific project. It is taken in good faith that as many of these as possible are incorporated into everyday activities to minimise excessive noise from the site.	Noted.
2.5.2 Whilst no specific BPMs are provided, references are made to BS 5228-2:2009+A1:2014, BS 6472-1: 2008 and BS 7385-2: 2009 and it is stated that BPMs for controlling vibration will be in accordance with the principles set out in these documents. The vibration risk is considered low and this approach is appropriate.	Noted.
2.10 - It is noted that the document stated that 'no works are to be undertaken at night to avoid impacts on nocturnal foraging and commuting bats'. However, the construction operating hours are stated in 2.7 and the CNVA to include night-time activities i.e. task 6 concreting works, structural steel works and mechanical erection works. There is therefore a contradiction which needs clarification.	The CNVMP has been prepared in co-ordination with the CEMP and DMS, including input from a qualified ecologist. The steelworks operates on a 24 hour basis. The Task 6 works are assessed as being acceptable during night time hours. The primary potential impacts on nocturnal foraging and commuting bats is lighting. Such impacts will be mitigated in this instance using lighting fixtures that are task specific, focused downwards and avoid illumination of the surrounding area. This is detailed in the CEMP.

Table 4 *Technical review comments from N1426.3 V1 and RSKA response*



On-site location	NSR Ref.	Noise Threshold Level Daytime, dB L _{Aeq, T} ⁽¹⁾	Noise Threshold Level – Evenings and Weekends, dB L _{Aeq, T} ⁽²⁾	Noise Threshold Level night-time, dB L _{Aeq, T} ⁽³⁾
Penrhyn South Curve	MP1	75	75	65
Visitor Centre	MP2	75	65	65
Near Canteen	MP3	75	75	65
Notes: 1: Monday – Friday 07:00-19:00 and Saturdays 07:00-13:00; 2: Monday – Friday 19.00–23.00, 13.00–23.00 Saturdays and 07.00–23.00 Sundays; and 3: 23.00–07.00.				

Table 5 Proposed on-site monitoring thresholds actions

Status	Typical dB(A) Range	Status Description	Required Action
Green	Below lower threshold	Noise levels within acceptable limits	Continue operations; no action required.
Amber	Approaching threshold	Noise nearing trigger threshold	Prepare for mitigation; review activities and BPM implementation.
Red	Exceeds threshold	Noise exceeds trigger/action threshold	Action required; implement additional mitigation measures where BPM not being implemented.

Table 6 Proposed on-site monitoring status and actions



