

784-B028992

17th February 2022

Response to comments received from Matthew Woollin, a Technical Specialist at the Environment Agency. The comments we received by Tetra Tech on 7th January 2022 regarding the submitted Noise Assessment [ref 784-B032806 dated 9th November 2020] for application number EPR/MP3107PP/A001.

Tetra Tech Responses in Blue

Environment Agency Comment 1

Supply appendices 1-4. - Reason: A full review of NMP was not able to be completed.

Tetra Tech Response 1

The four appendices being requested are as follows:

- *Drawings*
- *Site EMS Day Diary Checks Form*
- *Planned Preventative Maintenance Regime*
- *Daily Site Monitoring Check Sheet*

These appendices have been added to the latest version of the Operational Noise Management Plan which has been provided in conjunction with this response document.

Environment Agency Comment 2

Conduct a BS4142 noise survey off site. - Reason: Appendix 5 references in 4.0 Noise Survey that BS 7445-1: 2003 was used. Within the above guidance it states that BS4142 should be used and although this is referenced in appendix 5, this is done via a modelling programme. Eco Power is already sited, therefore an on-site survey should be conducted to BS4142.

Tetra Tech Response 2

Section 4.0 of the Noise assessment presents the results of the 'off-site' baseline noise monitoring. The scope of BS 7445-1 "Description and measurement of environmental noise – Part:1 Guide to Quantities and Procedures" is as follows:

"BS 7445 defines the basic quantities to be used for the description of noise in community environments and describes basic procedures for the determination of these quantities."

As the scope of the document suggests, this standard outlines the methodology, terminology and instrumentation that used for environmental measurement of noise. This standard does not include recommendation on how to assess noise from industrial/ commercial properties (or any other source of noise) only how to undertake the measurements.

The scope of BS 4142:2014+A1:2019 “Methods for rating and assessing industrial and commercial sound’ details the methodology for the assessment of commercial / industrial noise. Is as follows:

“This British Standard describes methods for rating and assessing sound of an industrial and/or commercial nature, which includes:

- a) sound from industrial and manufacturing processes;*
- b) sound from fixed installations which comprise mechanical and electrical plant and equipment;*
- c) sound from the loading and unloading of goods and materials at industrial and/or commercial premises; and*
- d) sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes, such as that from fork-lift trucks, or that from train or ship movements on or around an industrial and/or commercial site.*

The methods described in this British Standard use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident.

This standard is applicable to the determination of the following levels at outdoor locations:

- a) rating levels for sources of sound of an industrial and/or commercial nature; and*
- b) ambient, background and residual sound levels, for the purposes of:*
 - 1) investigating complaints;*
 - 2) assessing sound from existing, proposed, new, modified or additional source(s) of sound of an industrial and/or commercial nature; and*
 - 3) assessing sound at proposed new dwellings or premises used for residential purposes...”*

As can be seen within the above scope, BS 4142:2014 outlines the assessment methodology for assessing industrial / commercial noise but does not extend to recommending an off-site measurement methodology. As the two British Standards relate to different things they are not exclusive and it is industry standard to take environmental measurements in accordance with BS7445-1 to inform a BS 4142 assessment and would not invalidate any measurements or assessment. Therefore, it is considered that the approach taken to the measurements described within the submitted assessment is in-line with best practice.

Environment Agency Comment 3

Conduct BS4142 survey with representative weather conditions and operational times. – Reason: Within section 4.0 – the survey was primarily conducted during weekend hours and a southerly wind direction.

Tetra Tech Response 3

As described within Section 4.0 of Appendix V of the Noise Management Plan, long term unattended noise monitoring was carried out between Friday 7th– Tuesday 11th May 2021 for approximately four days. It is considered that noise levels in the area were measured for a sufficient time to be representative of the typical noise environment taking into account diurnal variations of weekday and weekend traffic and nearby commercial operations.

In terms of meteorological conditions during the survey, the wind direction data presented in Table 4.2 only relates to the attended measurement period which was between 10:30 Monday 10th May to 07:00 Tuesday 11th May and is based upon surveyor’s observations. As such, the meteorological measurements presented within Table are only representative of a small portion of the weather conditions throughout Friday 7th – Tuesday 11th May.

A review of historic wind direction collected in the area (Welton and North Ferriby) over the same time period are presented in Tables 1 and 2 below.

Table 1: Wind Direction Data collected at Welton (Weather Station ID: IBROUG5)

Wind Direction	% of measurement period
North	0.2%
NNE	1.7%
NE	9.8%
ENE	4.8%
East	2.2%
ESE	1.5%
SE	6.3%
SSE	17.5%
South	23.7%
SSW	8.9%
SW	5.1%
WSW	9.3%
West	8.0%
WNW	0.8%

Wind Direction	% of measurement period
NW	0.2%
NNW	0.0%

Table 2: Wind Direction Data collected at North Ferriby (Weather Station ID: INORTH604)

Wind Direction	% of measurement period
North	1.1%
NNE	9.1%
NE	3.8%
ENE	0.7%
East	1.4%
ESE	9.1%
SE	21.5%
SSE	15.1%
South	17.6%
SSW	11.8%
SW	5.8%
WSW	0.7%
West	0.5%
WNW	0.5%
NW	1.1%
NNW	0.1%

As can be seen from the data in Table 1 and 2, whilst the prevailing wind direction was from the South, South / South East and South / South West, the data suggests there was a reasonable mixture of wind directions throughout the long-term measurement period. The monthly wind direction averages for May 2021 have also been reviewed and the prevailing wind directions measured over the baseline noise monitoring period appear reasonable and representative of the wider monthly period.

Environment Agency Comment 4

Provide measurement data for the building with both the doors open and shut. - Reason: Although within the NMP it states noise attenuation from the building has not been applied, it is still Best Available Technique (BAT) to have doors shut. By recording the data for doors open and shut, it

can be determined whether the process can be conducted without noise pollution with the doors open.

Tetra Tech Response 4

As part of the on-site noise source survey that was undertaken, internal reverberant measurements of the pelletising shed were undertaken (see Appendix B - Source Noise Measurements, of the Environmental Noise Assessment report). As a worst-case assumption, the levels used within the CandaA noise propagation model and subsequent BS 4142 assessment are representative of the doors being open i.e. no transmission loss for noise reduction through roller shutter doors etc.

This is a worst-cast assumption and even with this factored into the models used to assess noise levels'; the predicted Rating Level at nearby sensitive receptors are no greater than 2 dB above background which is an indication of a Low Impact. As a worst-case assumption has already been factored into the calculation and assessment the value of re-measuring with doors open and closed would be minimal and unlikely to change the assessment or conclusions significantly (i.e. the predicted noise rating levels would reduce if the doors were assessed in a closed position).

However, it is acknowledged that BAT need to be applied where practicable to reduce noise. Therefore, revisions have been made to the control measures outlined Table 5 of the Noise Management Plan stating that the building openings will as standard be kept closed when practicable to help reduce noise at nearby sensitive receptors.

End of Document

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