

Additional information provided by Viridor Tees Valley Limited on 16/8/2024.

- Provide the weather data measured during your background sound level survey including time, date, wind direction and wind speed.

**Viridor Response - Weather conditions were obtained from a nearby weather station and were not measured at the noise measurement positions, as is now requested in the BS 4142 MID. The survey predated the requests of the BS 4142 MID.**

Reason

*In line with the [EA guidance](#), this information must be submitted so that the EA is able to audit the report.*

### Sound Sources

- Clarify the number of HGVs likely to leave and arrive on site

**Viridor Response - Four key scenarios have been considered:**

- **Average hour 09:00-16:00 (the period of the day when most HGVs will occur, typically 20 two-way movements per hour).**
- **Peak hour 14:00-15:00.**
- **Night-time without HGVs 23:00-05:00.**
- **Night-time with HGVs 05:00-07:00.**

**The tables below reflect the average / typical situation and a 10% fluctuation for the peak flow has been applied.**

**Table 1: Total vehicle trip movements (weekdays)  
vehicle trip movements (weekend days)**

Hour of day	Staff Vehicles		HGVs		Total Movements
	In	Out	In	Out	
00					
01					
02					
03					
04					
05			1	1	2
06	13		1	1	15
07	13	5	2	2	22
08			9	9	18
09			22	22	44
10			21	21	42
11			15	15	30
12	8		16	16	40
13			20	20	40
14	5		26	26	57
15		13	20	20	53
16			5	5	10
17		13	2	2	17
18			1	1	2
19			1	1	2
20		8			8

**Table 2: Total**

Hour of day	Staff Vehicles		HGVs		Total Movements
	In	Out	In	Out	
00					
01					
02					
03					
04					
05			1	1	2
06	13		1	1	15
07	13	5	2	2	22
08			2	2	4
09			7	7	14
10			17	17	34
11			16	16	32
12	8		12	12	32
13			13	13	26
14	5		16	16	37
15		13	20	20	53
16			15	15	30
17		13	4	4	21
18			1	1	2
19					
20		8			8
21					
22	5				5
23		5			5
<b>Total</b>	<b>44</b>	<b>44</b>	<b>127</b>	<b>127</b>	<b>342</b>

Reason

*It is important that the Environment Agency has these details of the application, so that we can audit the report and modelling.*

#### **Background sound level survey**

- Provide justification that the sound level survey is representative of the nearby residential receptors, if this cannot be provided a further survey should be carried out.

**Viridor Response - The baseline noise surveys were completed during January 2021 which was during a Covid-19 lockdown. The dominant noise source at each location was road traffic noise. It is expected that road traffic flows were less than typical due to the Covid lockdown. Therefore, the average and background noise levels measured are deemed to be worst case, i.e. lower than may be experienced now. Therefore, it is expected that the assessment presented is worst case and effects at the nearest noise sensitive receptors may be less than as described in the report.**

Reason

*The survey was undertaken in 2021, this is therefore now 3 years old. As a substantial length of time has passed between the survey and the present date, it is not clear if the measured levels reflect the background sound level which will be present in the area now. Therefore, further quantitative data should be provided (such as traffic flow data) to evidence that this data is representative of current conditions.*

- Clarify the method used to derive the background sound levels used within the BS 4142 assessment.

**Viridor Response – It was not possible to measure the representative background noise levels at the locations of the nearest noise sensitive receptors, due to access, suitable monitoring locations and security of the equipment being left unattended.**

**The representative background noise levels during daytime and night-time periods were determined through statistical analysis, as per BS 4142:2014+A1:2019. The daytime 1-hour and night-time 15-minute  $L_{A90}$  values were used.**

**The background noise levels at the nearest noise sensitive receptors were determined at ground and first floor levels using a noise prediction model that was calibrated to the measured  $L_{A90}$  values at each unattended monitoring position. The background noise levels used for assessment are less than measured (for ground floor receiver locations) or less than or equal to the measured  $L_{A90}$  values (for first floor locations).**

Reason

*Within the submitted report it states “Background noise levels have been determined using the noise prediction model that is calibrated to road traffic noise sources and the transformer plant that is adjacent to the A66 (near to receptor location R3)”. Although the details of this method are unclear, it seems very unorthodox, and clearly not covered within BS 4142. Any methods used to derive a background sound level not in line with BS 4142 would not be accepted by the Environment Agency. Ensure that the methods used to derive your background sound levels are in line with BS 4142.*