



3.5 NOISE

3.5.1 Introduction

This section of the EIS deals with Noise associated with the on-going operation of the existing soil recovery facility at Tallagh.

Soil recovery facilities by their very nature of using machinery and vehicles for delivery have the potential to generate noise albeit low levels and occasional in nature.

In January 2009, Tobin Consulting Engineers conducted a thorough Noise Assessment report for the existing soil recovery facility, which at that time was still operating under the Waste Permit issued by Mayo County Council. This report is submitted as **Appendix 3.5** and covers all matters relating to Noise and noise impacts and is still relevant to the review of Waste Licence W0256-01. In the Tobin Noise Assessment Report the necessary EIS topics to address noise and potential impacts of noise upon the environment are discussed including:

1.1	INTRODUCTION	1
1.2	METHODOLOGY.....	1
1.2.1	<i>Instrumentation Used</i>	1
1.2.2	<i>Measurement Procedure</i>	1
1.3	THE EXISTING ENVIRONMENT.....	2
1.3.1	<i>Introduction</i>	2
1.3.2	<i>Receptors</i>	2
1.3.3	<i>Existing Noise Environment</i>	2
1.4	POTENTIAL IMPACT	6
1.5	OPERATIONAL PHASE.....	6
1.5.1	<i>Noise impacts</i>	6
1.6	TRAFFIC IMPACTS.....	7
1.6.1	<i>Combined impact of all on-site operations</i>	7
1.6.2	<i>Vibration Impacts</i>	8
1.7	MITIGATION MEASURES	8
1.7.1	<i>Noise Mitigation</i>	8
1.8	CONCLUSIONS.....	9

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3.5.2 Existing Environment

The soil recovery facility is located in a sparsely populated rural area with surrounding land uses comprising of sheep farming; peat extraction; GAA pitch; former Mushroom Farm and dispersed one-off housing developments and old farmsteads. There nearest densely populated area close to the site is Belmullet some 2 ½ km to the south. The site is far removed from the public road.



A baseline noise monitoring study took place to assess the existing noise levels associated with the operation of the soil recovery facility at Tallagh and how this might have an impact on air quality.

3.5.3 Potential Impacts from Noise

The only Noise Emission from the facility will be mobile plant (Hitachi 200 excavator) and occasional trucks delivering soil material.

It is estimated that up to a maximum of approximately 90 truckloads of inert material will be accepted at the facility per week. This low level of traffic movement to/from the site will mean very low noise emissions from haulage truck to the atmosphere.

The plant on site, Hitachi 200 excavator, is used intermittently on daily/weekly basis, thus does produce high levels of noise emissions to the atmosphere.

Figure 3.5.3.1 below illustrates the Frequency Analysis for the noise source (Hitachi 200 excavator) on site measured at a distance of 5m. A pure tone was recorded at 63Hz although this was due to an external source as it was previously recorded at monitoring location N4 while the site was non-operational (Refer to noise monitoring report in **Appendix 3.5**).

This pure tone was not audible during monitoring and was noted once noise results had been downloaded.

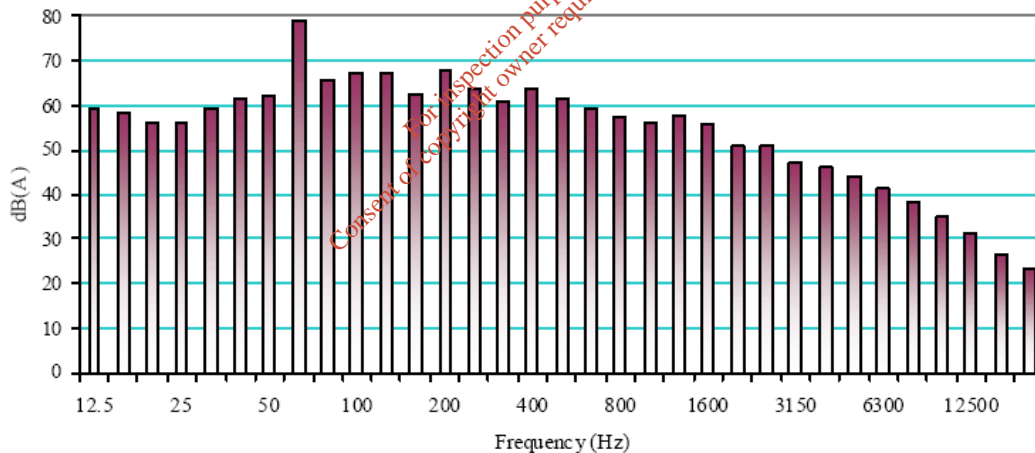


Figure 3.5.3.1: Frequency Analysis at Hitachi 200 - distance of 5m

Figure 3.5.3.2 shows environmental monitoring locations at the site as currently licensed and no additional monitoring points are proposed in the application for a Technical Review.

- Three No. 'Noise Monitoring' locations are located close to the boundary of the site:

Monitoring Point:	Grid Reference Location:
N1	E469488.392 N835689.268
N2	E469963.326 N835727.868
N3	E470234.691 N835923.115



- Two No. 'Noise Monitoring' locations are located at the Nearest Noise Sensitive Locations (i.e. the closest 2 no. residences):

Monitoring Point: Grid Reference Location:

N4	E470221.416 N836643.320
N5	E469743.123 N835108.874

It is proposed to monitor noise at the above locations biannually for: L(A)eq, L(A)10 & L(A)90.

The potential impacts from the proposal to increase the annual tonnage from 24,900 tonnes to 90,000 tonnes poses no change in the scope of the activity, the nature of the activity or potential emissions from the activity (as presently licensed).

- The development sequence will still be to fill the site progressively (as presently licensed).
- The lands are presently marginal agricultural land and will be restored using imported soil and stones to more productive agricultural land thereby having a consequential benefit to agriculture (as presently licensed).
- The exact same proposed activity will occur as licensed i.e. a total of 265,000 tonnes of soil and stones but over a shorter time span (i.e. ca. 2.5 – 3 years). The activity will just take a shorter time span to complete and fully restore to beneficial agricultural use.
- The site survey drawings submitted with the Waste Licence Review remain unaltered as there will be no change whatsoever in the proposed topographical levels based on the reclamation of the site occurring over a shorter time period. Therefore there is no change to finished site survey drawings.
- Therefore the proposed licence review creates no proposed change to the content, nature, composition or volume of materials intended for recovery by deposition at the site, and the overall tonnage of 265,000 tonnes for which the existing license was issued remains unaffected.

3.5.4 Noise Monitoring Results

Baseline noise monitoring took place in January 2009 and this is outlined in the Noise Assessment Report which forms **Appendix 3.5**.

The purpose of the baseline noise study is to assess the existing noise levels associated with the operation of the soil recovery facility at Tallagh and how this might have an impact on potential noise sensitive receptors.



3.5.5 Mitigation Measures

Lennon Quarries Ltd. is a member of the Irish Concrete Federation (ICF) and complies with the parameters contained within their Environmental Code of Practice with regards to Noise Control and Noise Monitoring.

The only noise source on the site is machinery noise. All activities take place during the stated daylight working hours. The applicant will take all adequate steps to minimise noise and ensure where possible that site operations adhere to BS 5228, 1997 Noise Control on Construction and Open Sites.

In relation to exhaust emissions from the site plant, Hitachi 200 excavator, this machine is serviced regularly to ensure exhaust emissions are kept to a minimum. The engine is turned off when not in use.

The operators take all reasonable steps as far as is practical to minimise noise emissions from material handling operations and use reasonable techniques for minimising the release of noise into the atmosphere.

Lennons Quarries Ltd. have the support of the local community with regards to the review to their existing Waste Licence W0256-01.

This is in the form of letters of support for the licence review from all the nearest residential dwellings (which would be considered the nearest potential noise and dust sensitive receptors). See **Figures 1.13.2** (letters) and associated map **Figure 1.13.1** and **Figure 3.5.3.2** in this EIS. Furthermore, there is the full support of the local GAA Club (see **Figure 1.13.3**), an adjoining land-use and a major part of the local rural community.

Therefore the licensee has demonstrated to the Agency that the licence review is supported by the local community as being a positive and pro-active step with environmental gains and benefits.

The site has been up and running for the past ca. 2 years without any complaints or enforcement issues relating to noise or noise nuisance as proven by Agency records. Furthermore, the compliance monitoring is all up to date and is all compliant with the license requirements. All in all it is considered that Lennon Quarries Ltd. operate an extremely well run and well-monitored licensed soil recovery facility

3.5.6 Monitoring

Monitoring of Noise Levels will take place biannually at Three No. 'Noise Monitoring' locations located close to the boundary of the site and two No. 'Noise Monitoring' locations located at the Nearest Noise Sensitive Locations (i.e. the closest 2 no. residences). Noise measurements will be taken for L(A)eq, L(A)10 & L(A)90. Certificates of noise results will be maintained on-site as part of the on-going Environmental Management Program.



3.5.7 Conclusions

The Noise Assessment Report carried out in January 2009 and included in **Appendix 3.5**, concluded that:

1.8 CONCLUSIONS

A comprehensive assessment of the potential noise and vibration impacts associated with the waste recovery site has been completed. Site activities will be effectively managed to ensure that all potential noise and vibration impacts are minimised to acceptable levels. There are no significant adverse or unacceptable noise or vibration impacts predicted at local sensitive receptors in the vicinity of the site as a result of the waste recovery facility operating.

The potential impacts from noise in the proposal to increase the annual tonnage from 24,900 tonnes to 90,000 tonnes poses no change in the scope of the activity, the nature of the activity or potential emissions from the activity (as presently licensed). There will therefore be no negative impact from noise on noise sensitive receptors in granting the licence review of Waste Licence W0256-01.

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Appendix 3.5: Noise Assessment Report (January 2009)

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