



RISK & HAZARD MANAGEMENT

008 – Noise Management Plan

Saffil Ltd (also known as Unifrax/Alkegen)

Line 4 Permit Variation



Safety Risk



Business Risk



Environment Risk

Document History

Version	Issue	Date	Notes	Author	Reviewer
1	-	05/05/22	Working draft with client.	J. Carroll R. Nibbs	C. Nicholls
2	1	01/07/22	Issue as part of permit application.	J. Carroll R. Nibbs	C. Nicholls R. Ritchie R. Nibbs

Contents

	Document History	1
1	Introduction	2
2	Noise assessment	3
3	Noise management plan	4

1 Introduction

Please note that this document refers to the site as Unifrax Widnes and to the owning company as Unifrax. Unifrax was the name of the American company that owns Widnes site. A further complexity is added because due to a recent merger, Unifrax has changed its name to Alkegen. So, it is possible in correspondence or discussions that the site may be referred to as Alkegen.

The legal entity that owns the site at Widnes is however called Saffil Ltd and remains so despite the name changes to Unifrax and Alkegen – and it is in this name that the EPR application is made on the accompanying forms.

A Noise Impact Assessment has been produced as part of the Planning Environmental Statement and is also submitted as part of the Line 4 Permit Variation. The reference for this document is 'ES Technical Appendix D Noise Impact Assessment' carried out by Hepworth Acoustics Ltd.

2 Noise assessment

The scope of the noise assessment comprises:

- Inspection of the site of the proposed new extension and surrounding area
- Measurement of existing noise levels in the vicinity of the nearest dwellings to the proposals
- Measurement of source noise levels of equipment proposed for the new extension
- Calculation of potential noise levels from the extension outside the nearest dwellings
- Recommendation of appropriate noise mitigation measures if necessary

The potential noise impact from operation of the proposed extension at the Unifrax Saffil Ltd facility in Widnes has been assessed.

The new extension will accommodate an additional production line, involving a lateral extension to an existing building, and the installation of some associated external fixed plant and machinery.

This assessment has involved carrying out a baseline noise monitoring survey and evaluating potential noise impacts associated with the proposals.

A BS 4142 assessment has been undertaken the findings of which have shown that operation of the proposed new production line and associated external fixed plant and machinery will not result in any significant noise that would impact on the amenity of the nearest residents at an approved residential development

3 Noise management plan

There have been no complaints about noise in the last 2 years and it is believed that the operations give no reasonable cause for offence or annoyance with regard to noise. Noise surveys have been carried out previously and a noise assessment carried out as part of the planning application for Line 4. All studies have shown no adverse impact.

Specific noise control techniques implemented onsite include:-

- Purchase of new machinery to a low noise specification
- Acoustic insulation or enclosures around identified noise sources.

The plant will be operated continuously day and night giving rise to a relatively constant, low-level noise. No significant non-routine events, which would give rise to high noise levels, are expected. The facility is surrounded by an industrial estate with similar noise generation potential. Periodic monitoring of equipment is carried out to assess any deterioration in condition and maintenance of enclosures/equipment is carried out.

HGV traffic supporting the operation of the plant is low compared to other local traffic and there is none expected between the hours of 10 pm and 6 am. Impact from traffic noise is therefore not considered to be significant. Traffic flows on site are generally one-way, designed to minimise the need for reversing with associated sound from reversing alarms.

There is some distance between the site and the nearest residential Noise Sensitive Receptors (NSRs). The nearest sensitive receptors are considered to be:

- New residential development to the west of the site (240 m)
- Halton Caravan Park (630 m)
- Domestic houses in French Street (750 m)

The new residential development has been considered within the planning application for Line 4 and was the main concern regarding potential noise impact. The results of the assessment have however shown that no adverse impact is expected.

The table below identifies the significant sources of noise from operations onsite and their likely impact. Any impact will be identified during operation from the results of monitoring. No significant sources of vibration have been identified.

Table 1 Noise management plan

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
On-site traffic movement	Residents & wildlife	Air, 240 m	Site has been designed, as far as practicable, for direct flow through, which will minimise the need for lorries to reverse in normal operation. No HGV traffic expected in night-time hours.	Daytime operation.	No increase in noise level above the background.	Not significant
Product despatch by road	Residents & wildlife	Air, 240 m	Site has been designed, as far as practicable, for direct flow through, which will minimise the need for lorries to reverse in normal operation. No product despatch expected during night-time hours.	Daytime operation.	No increase in noise level above the background.	Not significant
Dust extraction fans	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Line 2 and Line 3 dust extraction fans are constructed in an acoustic enclosure. Line 4 design will be similar.	Continuous operation.	No increase in noise level above the background.	Not significant
Line 2 primary air fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fan has a silencer and is acoustically lagged	Continuous operation.	No increase in noise level above the background.	Not significant
Line 2 Secondary air fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fan is acoustically lagged to minimise noise transmission	Continuous operation.	No increase in noise level above the background.	Not significant

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Line 2 Vent scrubber fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fitted with silencer and acoustic enclosure	Continuous operation.	No increase in noise level above the background.	Not significant
Line 2 oxidiser fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fitted in acoustic enclosure	Continuous operation.	No increase in noise level above the background.	Not significant
Line 3 primary air fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fan has a silencer and is acoustically lagged.	Continuous operation.	No increase in noise level above the background.	Not significant
Line 3 Secondary air fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fan is acoustically lagged to minimise noise transmission.	Continuous operation.	No increase in noise level above the background.	Not significant
Line 3 Vent scrubber fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fitted with silencer and acoustic enclosure.	Continuous operation.	No increase in noise level above the background.	Not significant
Line 3 oxidiser fan	Residents & wildlife	Air, 240 m	Noise standard for fan purchase is 80dB(A) max at 1m. Fitted in acoustic enclosure.	Continuous operation.	No increase in noise level above the background.	Not significant
Line 4	Residents & wildlife	Air, 240 m	Equipment and noise control arrangements as line 3. Noise assessment completed as part of planning assessment showed no specific	Continuous operation.	No increase in noise level above the background.	Not significant

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			additional measures required.			