

Sheds 36-38 Tilbury Docks

Noise Management Plan

13 August 2021

For

Cory Riverside Energy
5th Floor
10 Dominion Street
London
EC2M 2EF



Contents

1.0	INTRODUCTION	. 2
2.0	DESCRIPTION OF SITE, PROPOSALS, AND NOISE RISKS	. 2
3 U	NOISE MANAGEMENT PLAN	5
3.0	NOISE MANAGEMENT FLAN	ر.
4.0	NOISE MONITORING	.7
5.0	REVIEW AND TRAINING	.8
APPENDIX A – ACOUSTIC TERMINOLOGY		

Project Number 14273 Issue Date 13 August 2021

Document Reference R/NMP/1/210813 **Version** 01

Report Produced by Charlie Jones T: 07388 577623

BSc(Hons) AMIOA E: cjones@auricl.com

Reviewed by Nicholas Jones T: 07739 715411

BEng(Hons) CEng MIOA E: njones@auricl.com

auricl Limited 107 Cheapside 9 Greyfriars Road

www.auricl.com London Reading hello@auricl.com EC2V 6DN RG1 1NU

Registered Company 09824075

Copyright © auricl Limited 2021. All rights reserved. This report is confidential to the party to whom it is addressed and their professional advisers for the specific purpose to which it refers. No responsibility is accepted to third parties, and neither the whole nor any part of this report nor reference thereto may be published or disclosed without the written consent of auricl Limited.



1.0 Introduction

A new integrated waste management transfer station (IWMTS) is proposed at Sheds 36-38 of Tilbury Docks in Tilbury, Essex.

To ensure that a "<u>low noise impact</u>" is maintained throughout the life of the development, **auricl** has been instructed to propose a noise management plan to determine the best practicable measures to be implemented at the site.

The purpose of this noise management plan is summarised as follows:

- To identify potential sources of noise further to the proposed activities
- To ensure that a cumulative "<u>low noise impact</u>" is maintained throughout the life of the development
- To describe measures that will be implemented to minimise noise emissions to the nearest noise sensitive properties, to prevent nuisance
- To describe measures for responding to any complaints that are received
- To outline the noise monitoring principles that will guide the monitoring process to be implemented

This report presents a description of the site and proposed activities, identifies the nearest noise sensitive properties and proposed measures to control noise emissions.

2.0 Description of Site, Proposals, and Noise Risks

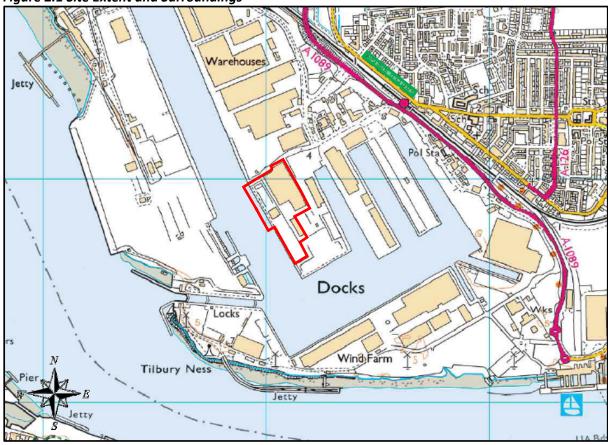
The proposed development site is located at Sheds 36-38 at Tilbury Docks in the borough of Thurrock, Essex.

Residing within the Port of Tilbury, the site is located in an industrial area on the northern bank of the river Thames, with the nearest residential properties to the north-east on Dock Road, approximately 580m from the nearest site boundary.

Figure 2.1 shows the approximate site extent in **red**, and the nearest noise sensitive properties **green**, in relation to the surrounding area.



Figure 2.1 Site Extent and Surroundings



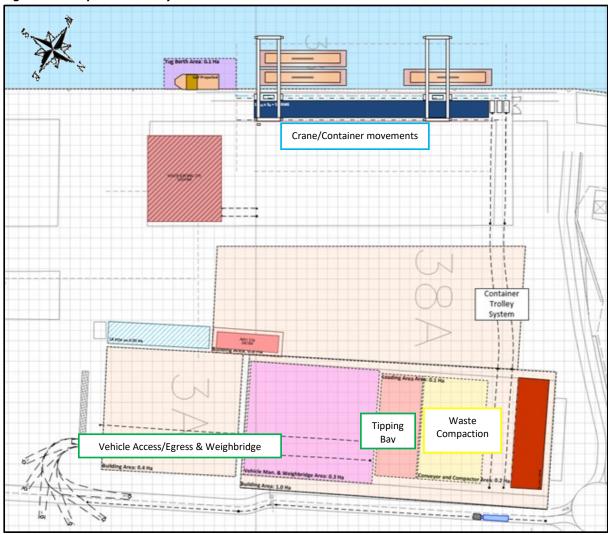
It is proposed to develop the site to create a new integrated waste management transfer station (IWMTS). The primary function of this facility is understood to be the faciliation of large scale transportation of municiple and commercial waste. This would consist of the following key noise generating processes:

- Collection of waste via RCV, Artic, and other vehicle delivery, directly into compactors
- Compaction of waste into 13 tonne containers
- Loading of containers onto barges via crane
- Unloading of empty containers from barges onto the quayside, via crane

The proposed site layout and the locations at which the above activities will take place, is shown in Figure 2.2.



Figure 2.2 Proposed Site Layout and Activities



The following quantities are proposed in relation to the proposed activities:

- 24-30 vehicle arrivals per hour at peak times
- 10 transfer compactors total
- 30 tonnes of waste processed per hour by each compactor, with a 13 tonne container capacity
- 240-260 container lifts by crane per day

An assessment has been undertaken to predict the noise impact of the associated activities at the nearest noise sensitive properties. The full assessment can be found within the noise impact assessment report ref: R/NIA/1/210401. The results of the assessment showed that none of the proposed activities or their cumulative effect, presented more than a "<u>low noise impact</u>" at the nearest noise sensitive residential properties during both daytime and night-time periods in accordance with BS 4142: 2014.

Further noise risks in exceptional circumstances could consist of, but are not limited to the following:

- Risk of increased delivery vehicle queues (various possible causes e.g., a breakdown on the weighbridge)
- Risk of excessive vehicle noise and reverse alarms



- Risk of excessive mobile plant noise
- Risk of excessive material handling noise
- Risk of extreme wind/adverse weather conditions
- Risk of operator error (e.g., dropping containers)

Breakdowns and accidents on site are expected to result in a cease of operations and therefore are not anticipated to present a further increased noise risk.

Site activity noise is not anticipated to be significantly affected by temperature.

Noise management and mitigation in respect of the above items is addressed in the following sections.

3.0 Noise Management Plan

Measures that will be implemented in order to minimise the noise impact on surrounding properties are described in the following sections.

3.1 Liaison

Good relationships should be formed with any site neighbours through early and prompt liaison, informing neighbours which may be affected by noise of the following:

- The proposed operating hours of the works
- The nature of the works
- Contact details for appropriate site personnel and project personnel

Regular communication will be maintained with the site neighbours and a display board will be erected outside the site presenting contact details of appropriate site and project personnel.

Prior knowledge of atypical site activity noise that could affect site neighbours will be communicated promptly and effectively, and address any concerns that may be raised.

3.2 Noise Mitigation Measures

The site manager shall be responsible for the implementation of the noise management plan and updating it in response to any significant noise events. In their absence, a nominated deputy who is technically competent shall be responsible for its implementation. It is also recommended that the site manager/nominated deputy carries out daily subjective inspections to ensure compliance with the plan.

At all times, site works will be undertaken by best practicable means, so as to reduce activity noise levels affecting neighbouring properties. As far as is practicable, it will be ensured that:

- Site activities only take place during the agreed operating hours
- Noise from equipment and activities is attenuated at source, through the use of low-noise, wellmaintained machinery, so as to minimise noise emissions
- Acoustic attenuation due to distance and screening of site activities is maximised, via works programming and use of screening from intervening buildings and structures.

The following measures will be adopted to control noise emissions associated with the site operations:

- Ensure site activities and deliveries are limited to the currently consented operating hours
- Noisy activities to be carried out indoors wherever possible



- Selection of quiet plant/machinery, fitted with proprietary noise control measures where necessary
- All machinery and vehicles to be switched off when not in use
- Machinery to be regularly maintained to ensure correct operation
- Booking/appointment system to be used for visiting vehicles to avoid queues and waiting on nearby roads
- All visitors to be made aware of the sensitivity of the site neighbours by way of clear signage inside and outside the main site entrance
- Site staff to manage visiting vehicles to ensure no waiting on public roads or in the site entrance
- Site staff to manage visiting vehicles to ensure no engine idling in the site entrance or on public roads
- Tonal reverse alarms not permitted on the site (including visiting vehicles) broadband reverse alarms should be used
- Horns not to be used by site vehicles or visiting vehicles on or near the site
- Care to be taken when moving materials around the site materials to be carefully placed from a minimal height and not dropped
- Digger buckets not to scrape along the ground
- Operatives to minimise the clanking of grab jaws
- Hand tools (angle grinders etc) only to be used in fully enclosed buildings/shelters within the site
- Main access gate to be kept closed and only opened for visiting vehicle arrival and departure
- Barges not to be loaded in strong winds, crane and container/barge associated activities are limited to the appropriate weather conditions i.e., calm weather
- All staff to undergo robust and rigorous training to minimise operator error
- Operating procedures to be continually developed and improved in correspondence with site developments and emerging scenarios

3.3 Complaint Handling

Any complaints that are received in relation to noise associated with the site will be acted upon promptly and positively.

Contact details (telephone, email) shall be displayed on the outside of the building (or on the website) to ensure that any complaints can be communicated directly.

The following details shall be recorded for any complaint:

- Date and time of event
- Name of complainant
- Receptor location/s (address, internal/external)
- Specific noise issue causing the problem
- Observations and nature of the issue (continuous/intermittent, character of noise)
- Effect of the issue on the receptor (nuisance, sleep disturbance, outside/inside, etc.)
- Longevity of the issue (ongoing, short-term, etc.)



- Weather conditions at time of issue
- Relevant staff name/s

Any complaints will be acted upon immediately to understand the extent of the issue and to take all necessary action to mitigate the problem.

Where appropriate, complaints received should undergo further investigation in the form of noise monitoring, specific in response to the complaint received.

The noise monitoring procedure in response to complaints is described in the following section.

4.0 Noise Monitoring

Monitoring of noise emissions associated with site activities should be undertaken at the location of the nearest noise sensitive neighbouring properties, as is indicated on Figure 4.1.

Warehouses

Poi Sta

Figure 4.1 Site Plan Indicating Proposed Noise Monitoring Position

Noise monitoring shall be fully manned and undertaken using a Type 1 sound level meter fixed to a tripod at a height of approximately 1.5 metres above ground level in free-field.

 L_{Aeq} and L_{A90} sound pressure levels shall be recorded at the monitoring position during site operating hours for an agreed duration that gives a suitable sample of the activity in question.

A report shall be prepared presenting the measured noise levels, as well as an assessment in accordance with the methodology and criteria specified in BS 4142: 2014 "Methods for rating and assessing industrial and commercial sound".



5.0 Review and Training

This noise management plan shall be reviewed every 12 months and updated where necessary.

All site staff and new joining staff shall be trained on the contents of this noise management plan (and any updates) and the sensitivity of the neighbouring properties, with reminder notices placed around the inside of the site.



Appendix A – Acoustic Terminology

Parameter	Description
Decibel (dB)	A logarithmic scale representing the sound pressure or power level relative to the threshold of hearing ($20x10^{-6}$ Pascals).
Sound Pressure Level (L _p)	The sound pressure level is the sound pressure fluctuation caused by vibrating objects relative to the threshold of hearing.
A-weighting (L _A or dBA)	The sound level in dB with a filter applied to increase certain frequencies and decrease others to correspond with the average human response to sound.
Free-field	An area of space devoid of obstacles and where there are no nearby reflecting surfaces. This excludes the ground at 1.5m and obstacles at least 3.5m away.
L _{Aeq,T}	The A-weighted equivalent continuous noise level over the time period T (typically $T=16$ hours for daytime periods, $T=8$ hours for night-time periods).
	This is the sound level that is equivalent to the average energy of noise recorded over a given period.
L _{A90}	The noise level exceeded for 90% of the time, also referred to as the background noise level.