APPLICATION FOR AN ENVIRONMENTAL PERMIT UNDER THE ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016 (AS AMENDED)

NOISE MANAGEMENT PLAN

FCC WASTE SERVICES (UK) LIMITED,
TEES VALLEY ENERGY RECOVERY FACILITY,
GRANGETOWN PRARIE, GRANGETOWN,
REDCAR

ECL Ref: FCCE.04.01/NMP
October 2023
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ACRONYMS / TERMS USED IN THIS REPORT

BAT	Best Available Techniques
C&I	Commercial and Industrial Waste
CCTV	Closed Circuit Television
DAA	Directly Associated Activity
DME	Diymethyl Ether
EA	Environment Agency
ECL	Environmental Compliance Limited
EfW	Energy from Waste
EMS	Environmental Management System
EP	Environmental Permit
ERF	Energy Recovery Facility
FCC	FCC Waste Services (UK) Limited
FGT	Flue Gas Treatment
FPP	Fire Prevention Plan
FRS	Fire and Rescue Service
Ha	Hectares
HGV	Heavy Goods Vehicle
HZI	Hitachi Zosen Inova
IBA	Incinerator Bottom Ash
MOT	Ministry of Transport
NGR	National Grid Reference
NMP	Noise Management Plan
NSR	Noise Sensitive Receptor
OS	Ordnance Survey
PPMR	Planned Preventative Maintenance Regime
Ramsar	The Ramsar Convention on Wetlands of International Importance
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest
STDC	South Tees Development Corporation
the Installation	Tees Valley Energy Recovery Facility
WTS	Waste Transfer Station

DOCUMENT CONTROL

Date	Version	Section	Description	Prepared by	Approved by
Oct 2023	Issue 1	All	All	ECL	SR

1. INTRODUCTION

1.1. Requirement for a Noise Management Plan

1.1.1. Environmental Compliance Limited ("ECL") has been appointed by FCC Waste Services (UK) Limited ("FCC") to prepare a Noise Management Plan ("NMP") to form part of the bespoke Environmental Permit ("EP") application for a proposed Tees Valley Energy Recovery Facility ("ERF"), referred to hereafter as "the Installation", located on Grangetown Prairie, Grangetown, Redcar, TS6 6TY.

1.1.2. The Environment Agency ("EA") has requested that a NMP is submitted as part of the Permit application with emphasis on controlling noise impact during weekend night-time periods.

1.1.3. This NMP has been prepared in accordance with the EA online guidance *'Noise and vibration management; environmental permits'*[1].

1.1.4. The NMP has been prepared to demonstrate FCC's competence and commitment to controlling noise pollution. The NMP outlines all activities which have the potential to cause noise nuisance and details the systems and controls in place to manage that risk effectively.

1.1.5. The NMP addresses the following issues:

- the activities which could cause noise nuisance;
- identification of potential Noise Sensitive Receptors ("NSRs");
- process controls and procedures;
- monitoring regime;
- emergency scenarios;
- potential corrective actions;
- complaints procedure; and
- record keeping.

1.1.6. The NMP provides a management framework comprising of proactive and reactive measures to manage and control noise emissions from the Installation. This proactive approach will facilitate the ongoing development of operational procedures and controls as part of an on-going commitment to improve environmental performance. Reactive procedures will also be established within the NMP for the logging, evaluation, and implementation of corrective actions in the event of any noise related complaints being received.

1.1.7. FCC understand and accept responsibility for controlling noise impact from site activities. FCC operate a range of waste management sites including Material Recycling Facilities ("MRF"), ERF and landfill sites in the UK. This experience and expertise in regard to waste operation noise impact and control will be applied to the Tees Valley ERF to ensure noise impact is prevented and reduced.

[1] EA Online Guidance, *'Noise and vibration management: environmental permits', available at: https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits/noise-and-vibration-management-environmental-permits, updated January 2022, accessed September 2023.*

1.1.8. FCC has formed a strategic partnership with global leader Hitachi Zosen Inova ("HZI") to provide the technology for the Installation. HZI has an experienced and knowledgeable team of engineers and technicians of more than three hundred based in Zurich.

1.1.9. HZI adopt an integrated approach from first concept design, through to commissioning and operation, including long term major maintenance and overhaul services. For all the key components, HZI have developed in house proprietary technologies that are tried and tested in design, manufacturing, supply, installation and operation over many years and many projects. Noise control is considered and addressed as part of the integral design including determining appropriate location and layout of the equipment and buildings, as well as the selection of low-noise equipment, noise attenuation and noise control infrastructure.

1.1.10. It is the ERF General Manager and Environmental, Health and Safety ("EHS") Manager who will be responsible for overseeing the effective implementation of the NMP and ensuring compliance is maintained.

2. DESCRIPTION OF THE SITE AND THE PROPOSED ACTIVITIES

2.1. Site Location and Settings

2.1.1. The Installation is located on Grangetown Prairie adjacent to the A66 road network and within the western footprint of the former Cleveland Steel Works, now part of the South Tees Development Corporation ("STDC").

2.1.2. The Installation is centred on Ordnance Survey ("OS") National Grid Reference ("NGR") NZ 54445 21368 and will occupy an area of approximately 10 hectares ("Ha").

2.1.3. The Site Location Plan (Drawing Reference 1425_EP001) details the proposed Environmental Permit boundary (outlined in green) and is provided in Appendix I of this NMP.

2.1.4. Figure 1 provides the indicative location of the Installation (red outline) within the context of the surrounding environment.

Figure 1: Indicative Site Location

2.1.5. South Bank station is located approximately 900m west of the Installation. The town of Eston is located approximately 2.5km to the south of the Installation and the village of Lazenby is located approximately 3km to the southeast. Middlesbrough town centre lies approximately 4.5km east of the Environmental Permit Boundary.

2.1.6. The Installation is contained within the Dorman Point Zone of the Teesworks Development, a 4,500 acre site comprising eleven zones on and around the banks of the River Tees. Other zones within the development owned by the South Tees Development Corporation include the Lackenby Zone and the South Bank Zone.

2.1.7. The surrounding land uses, colour coded for each different land use, within 1km of the Environmental Permit boundary are displayed on the Sensitive Receptor Plan (Drawing Reference 1425_EP003) which is also contained in Appendix I.

2.2. Description of the Proposed Activities

2.2.1. The proposed Installation will thermally process up to 450,000 tonnes per annum of non-hazardous municipal solid waste, together with non-hazardous commercial and industrial waste ("C&I"). Consequently, the proposed activities fall under Section 5.1, Part A(1)b of the Environmental Permitting (England and Wales) Regulations 2016, namely *'the incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour.'*

2.2.2. The following Directly Associated Activities ("DAAs") are proposed:

- electricity generation – generation of a maximum of 49.9Mwe gross electrical production;
- back up electrical generation – providing emergency electrical power to the plant in the event of supply interruption;
- waste shredding – shredding of bulky waste prior to incineration within the waste reception hall; and
- waste storage – storage of municipal and commercial waste during temporary shutdown of one or both incineration lines. This will be undertaken within the associated Waste Transfer Station ("WTS") at the Installation.

3. POTENTIAL SOURCES

3.1. On-Site Sources

3.1.1. The potential sources of noise emissions from the Installation activities include:

- heavy goods vehicle ("HGV") movements delivering materials, such as waste and other raw materials, into the Installation via the gatehouse and weighbridge;
- operational activities in the waste reception hall and bunker;
- shredder processing activities to reduce the size of the bulky waste prior to incineration;
- operation of the ERF to recover energy and heat from the residual waste;
- flue gas treatment ("FGT") and discharge stack induced draught fan;
- incinerator bottom ash ("IBA") treatment;
- use of a transformer;
- compressor room;
- operational activities at the workshop and parts store
- WTS operations, to be used as contingency during ERF shutdown; and
- HGV movements exporting materials, such as IBA from the Installation.

3.2. Other Local Contributors of Noise Emissions

3.2.1. The immediate setting around the Installation is industrial and commercial units. The Grangetown Prairie is bordered by a dense mixture of commercial and industrial units to the east, west and south and a railway line to the north.

3.2.2. The types of industry operating in close proximity of the Installation that may contribute to the ambient sound levels in the area include steelmaking, aggregate washing, vehicle repairs and storage, haulage supply and distribution, material handling equipment supplies and materials processing.

3.2.3. The identified other local contributors of noise emissions should be considered in the event of a complaint being received at the Installation which needs to be substantiated. Community liaison and response to complaints is covered in Section 6.2 of this NMP.

4. POTENTIAL SENSITIVE RECEPTORS

4.1. Consideration for Identifying Sensitive Receptors

4.1.1. To determine the severity of emission i.e., noise nuisance, which may arise from the Installation, the sensitivity of the receiving environment and potential receptors have been considered. The degree of sensitivity in a particular location is based on the characteristics of the land use, including the reason why people are at the particular location (e.g. for work, recreation or residence).

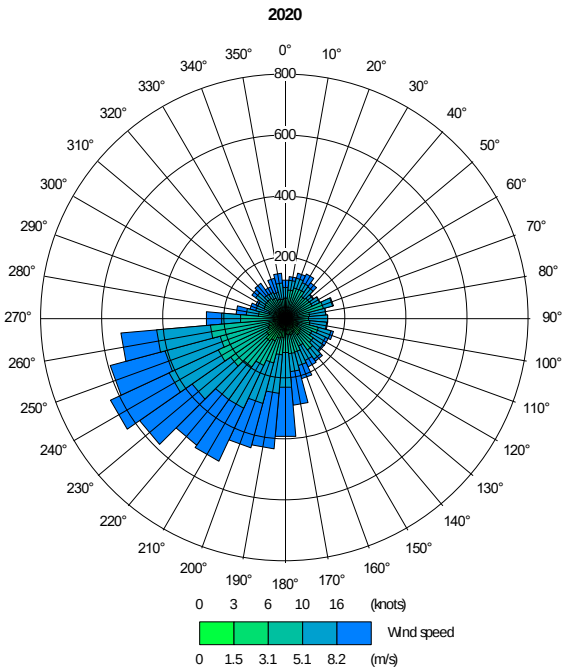
4.1.2. A summary of the environmental setting is provided in Table 1.

Table 1: Surrounding Land Uses

Boundary	Description
North	Railway, large industrial sites (including concrete mixing, gas processing and storage plants, power substation), River Tees and open space and unoccupied brownfield land.
East	Unoccupied brownfield land, industrial units (including steelmaking, waste management - energy from waste, wood storage, warehouses and distribution).
South	Industrial and commercial units (including skills academy, oil recycling and disposal, vehicle repair, charity offices, pallet supplier, residential land use, playground, community centre, child nurseries and schools.
West	Industrial and commercial units (storage and distribution, vehicle repair, haulage, business centre, supermarket), A66 road network, motor sports park, chemicals distributor and residential land use.

4.1.3. The noise climate can also be influenced by the meteorological conditions at the Installation and surrounding area. The 2020 wind rose from Loftus Meteorological Station which is located approximately 19km to the east of the Installation, is shown in Figure 2. This shows the wind direction is predominately south westerly, consequently, noise emissions are likely to be blown away from the direction of the human sensitive receptors located to the southwest (see Figure 3).

Figure 2: Annual Wind Rose (2020) – Loftus Meteorological Station



4.1.4. Additionally, the degree of sensitivity depends on the distance from the emission source as the closer the receptor is to the source, the higher the potential for nuisance will be at the receptor location. Therefore, potentially sensitive receptors within 0.5km of the Installation centre point have been identified and are considered in this NMP. For completeness, potential sensitive receptors within 1km of the Installation are also identified and considered.

4.1.5. It should also be noted that following pre-application advice discussions with the EA, the potential sensitive human receptors following future development in the surrounding area have also been taken into consideration where relevant.

4.1.6. There are several consented developments in the surrounding area that are known, they are as follows:

- erection of a renewable gas production facility - diymethyl ether ("DME") facility, located on Plot 6 Dorman Point Teesworks approximately 355m east of the Installation;
- erection of a wind turbine blade manufacturing plant at land on South Bank on Tees Dock Road located approximately 1.03km north of the Installation;
- potential new energy from waste ("EfW") site opening in 2026 and situated approximately 1.6 km east-northeast from the Installation; and
- Dockside Road (1) and Dockside Road (2), Teeside Renewable Energy Centre expected to be operational within the next few years and situated approximately 1.7 km to the west of the Installation.

4.1.7. It should be noted that some of the developments listed above are located outside of the 1km search radius for identifying potential NSRs. Those receptors outside of the 1km search radius are not considered likely to be affected by any potential noise emissions resulting from the ERF and therefore, are not considered further.

4.1.8. All potential NSRs considered are shown on Figure 3 and summarised in Table 2.

Figure 3: Identified NSR within 500m of the Facility Permit Boundary

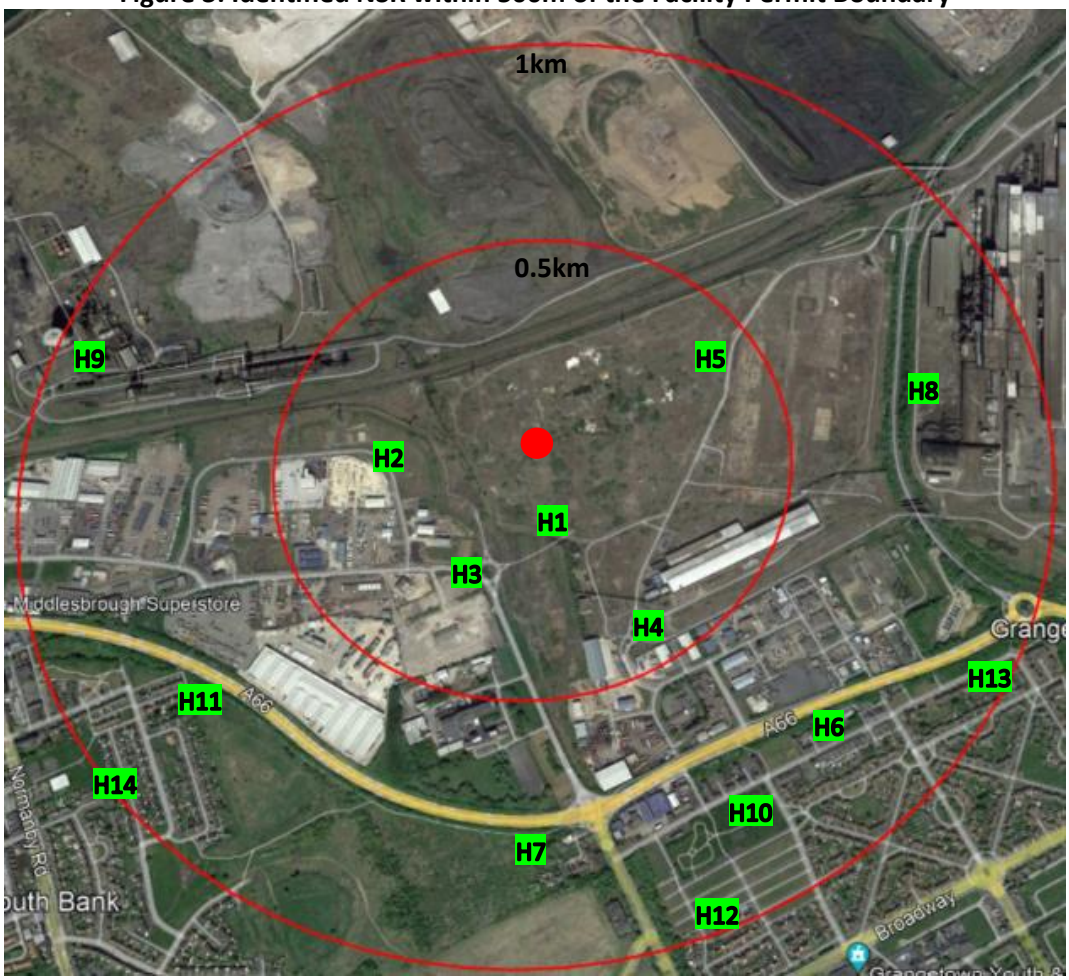


Table 2: NSRs within 0.5km and 1km of the Installation Centre Point

Ref	Description	Centre Point		Nearest Point	Direction
		Easting	Northing	Distance from Installation Centre Point (km)	
H1	Training facility off Eston Road	454410	521099	0.2	SW
H2	Industrial activity off John Boyle Road	453979	521277	0.21	SW
H3	Industrial activity off Eston Road	454299	520815	0.32	SW
H4	Industrial activity off Stapylton Street	454699	520909	0.43	S
H5	Industrial Consented DME Facility	454796	521526	0.36	E
H6	Residential properties off Cheetham Street	454963	520759	0.64	SE
H7	Residential Properties off Elgin Avenue	454538	520528	0.79	S
H8	Industrial activity off Tees Dock Road	455310	521464	0.62	E
H9	Industrial activity off Smith's Dock Road	453665	521501	0.71	NW

Table 2: NSRs within 0.5km and 1km of the Installation Centre Point (Cont.)

Ref	Description	Centre Point		Nearest Point	Direction
		Easting	Northing	Distance from Installation Centre Point (km)	
H10	Playground	454848	520634	0.80	SE
H11	Residential properties off Jones Road/Passfield Crescent	453677	520753	0.81	SW
H12	Residential properties off Granville Road	454804	520407	0.98	S
H13	Residential properties off Bolckrow Road	455307	520887	0.98	SE
H14	Golden Boy Green Community Centre	453574	520682	1.00	SW

4.1.9. With regards to potential ecological receptors, there are no statutory designated sites for nature and ecological conservation within 500m of the Installation. There are also no local wildlife sites or areas of Ancient Woodland within 500m of the Installation. The Teesmouth and Cleveland Coast site which is designated as a Special Protection Area ("SPA"), Ramsar Convention on Wetlands of International Importance site "Ramsar"), and Site of Special Scientific Interest ("SSSI") is approximately 1.5km from the Installation centre point at its nearest point. The Teesmouth and Cleveland Coast ecological site covers a large area and is broken up into many different segments, depending on the designation and coastal priority habitat.

5. OPERATIONAL AND PROCESS CONTROLS

5.1. General Control Measures

5.1.1. The control measures detailed within this Section of the NMP demonstrate compliance against the best available techniques ("BAT") to prevent or, where that is not practicable, to reduce noise emissions.

5.1.2. The following BAT have been considered and implemented;

a) appropriate location of equipment and buildings;
b) operational measures;
c) low-noise equipment;
d) noise attenuation; and
e) noise-control equipment and infrastructure.

5.1.3. During the conception and design phases of the Installation, the site layout and orientation, appropriate location of equipment and ancillary buildings were considered in relation to location of the nearby sensitive receptors. In addition, the use of buildings as noise screens, and to increase the distance from the emitter (Installation) to the receiver (sensitive receptors) was maximised.

5.1.4. Further measures incorporated into the design include the erection of an acoustic bund to the south and west of the site, the use of acoustic enclosures where appropriate and the use of attenuators.

5.1.5. The internal processing at the Installation and energy generation will operate on a continuous (24 hour) basis 365 days per year, whilst the delivery of waste will be restricted to the following hours:

- Monday to Friday 05:00 – 22:00;
- Saturday and Sunday 06:00 – 20:00; and
- all bank holidays as per weekend hours except Christmas Day.

5.1.6. Personnel will be suitably trained to understand the conditions of the Environmental Permit and implementation of the Environmental Management System ("EMS") which includes relevant management plans. The Installation will be managed in accordance with the EMS which will be reviewed regularly to ensure it remains appropriate and up to date.

5.2. Planned Preventative Maintenance Regime

5.2.1. All plant and machinery will be maintained in good working order in accordance with the Planned Preventative Maintenance Regime ("PPMR").

5.2.2. Any malfunction or breakdown leading to abnormal noise emissions will be dealt with promptly and operations modified or suspended until normal working practices can be restored.

5.2.3. Under the PPMR, machinery will be subject to pre-use and daily checks as well as regular scheduled inspections at appropriate time intervals.

5.3. Noise Monitoring

5.3.1. Operators will be trained in the prompt identification and reporting of abnormal noise generated on site.

5.3.2. The EHS Manager will undertake a daily site walk over in which any abnormal noise or vibration issue internally or externally will be recorded, and actions raised. The noise monitoring locations will encompass all the site areas in which potential noise emitters have been identified (see Section 3.1.) and from all directions at the Installation Environmental Permit boundary (Appendix I). The noise monitoring and findings will be recorded on the Daily Environmental Monitoring Checksheet which will form part of the EMS.

5.3.3. Ad hoc site safety walks and environmental audits will also be completed as part of the EMS and any actions are recorded.

5.3.4. Noise monitoring findings will also be discussed during monthly EHS meetings.

5.3.5. Additionally, periodic boundary noise monitoring will be performed annually to determine any changes in the intensity of the sound over time. Should the periodic monitoring suggest on-site noise levels are increasing, monitoring of the noise generating activities on the Installation will be undertaken and impact at the NSR locations detailed in the Noise Impact Assessment BWB-ZZ-ZZ-RP-YA-001_NIA_S0_P05 repeated to determine the potential degree of impact on the NSRs.

5.4. Process Stages, Potential Emission Sources and Associated Risk Level

5.4.1. Table 3 details the environmental risk assessment undertaken for potential noise arising at the Installation. It can be observed that the control measures reduce the overall risk to insignificant.

Table 3: NMP Risk Assessment and Control Measures

Potential Source	Receptor	Pathway	Control and Mitigation Measure	Probability of Exposure	Consequence	Overall Risk
Vehicle movements including transporting waste to the Installation, exporting materials such as IBA and also internal vehicle movements within the Installation. .	NSRs in the local area – see Section 4	Releases to air	The Installation site layout has been designed to incorporate a one-way system around the site for vehicles. The one-way system has been designed to reduce movements on site and hence reduce the intermittent beeping generated from reversing manoeuvres as required for the health and safety of all workers. Waste delivery operational hours are restricted in accordance with the site's planning permission. All vehicles will be limited to 10mph on site. Vehicles will not be permitted to have their engines running for prolonged periods. FCC vehicle daily checks are undertaken to ensure that they are in a good working condition and any faults are identified and addressed prior to operation around site. All site vehicles are also subject to annual servicing and maintenance checks.	Low Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant
Operations within the Waste Reception Hall and bunker including waste tipping.	NSRs in the local area – see Section 4	Releases to air	All tipping is undertaken internally within the Waste Reception Hall. Tipping will only commence once the building doors are closed as each tipping bay is accessed by means of a fast action roller-shutter door which will be operated automatically on the approach of a vehicle. The roller-shutter door will close after the vehicle enters the tipping bay to ensure that all waste handling activities are undertaken within the confines of the building. All tipping will be overseen by competent FCC personnel.	Low Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant

Table 3: NMP Risk Assessment and Control Measures (Cont.)

Potential Source	Receptor	Pathway	Control and Mitigation Measure	Probability of Exposure	Consequence	Overall Risk
Shredder processing activities to reduce the size of the bulky waste	NSRs in the local area – see Section 4	Releases to air	This is an intermittent operation and only undertaken when bulky wastes are received such as mattresses. It is anticipated that the shredder will only run 4 hours a day, 5 days a week. The feed hopper of the shredder is located in the waste bunker at the same height as the feed hopper for the incineration line. Bulky waste from the waste bunker is fed by using the waste crane. The shredded waste drops through a discharge chute back into the waste bunker. Therefore, this activity benefits from noise attenuation as it is undertaken within the main ERF building. Low noise motors will be used, and the shredder will be covered by the planned preventative maintenance regime contained within the EMS to ensure adequate maintenance of any parts of plant or equipment whose deterioration may give rise to increases in noise.	Low Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant
Main ERF operation to generate power (including boiler hall, turbine hall, FGT, discharge stack fan, IBA treatment and loading, air cooled condensers).	NSRs in the local area – see Section 4	Releases to air	An acoustic bund to the south and west of the Installation will be erected and acoustic enclosures where appropriate and attenuators will be installed for equipment with the potential to generate excess noise. A sound attenuator will be fitted between the induced draft fan and main stacks. The turbine air cooler fans are fitted with acoustic screens to reduce noise emissions.	Low/Moderate Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant

Table 3: NMP Risk Assessment and Control Measures (Cont.)

Potential Source	Receptor	Pathway	Control and Mitigation Measure	Probability of Exposure	Consequence	Overall Risk
Main ERF operation to generate power (including boiler hall, turbine hall, FGT, discharge stack fan, IBA treatment and loading) (Cont.)	NSRs in the local area – see Section 4	Releases to air	All operations are located within designated areas of the Installation and all processing activities are located away from the Permit boundary and within buildings to reduce the likelihood of noise nuisance being experienced by sensitive receptors such as those in residential areas. Low noise design is proposed and process plant and equipment with the potential to result in noise nuisance (e.g. waste shredder, gas engines) will be housed internally and/or equipped with noise insulation as necessary. All site plant and equipment are covered by the PPMR contained within the EMS to ensure adequate maintenance of any parts of plant or equipment whose deterioration may give rise to increases in noise. All personnel will be trained in the operation of all equipment and in noise management and the prompt reporting of any abnormal noise so that it can be rectified immediately.	Low/Moderate Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant
Transformer and substation	NSRs in the local area – see Section 4	Releases to air	The transformer and substation have been located a considerable distance from the sensitive receptors, such as the residential areas and will benefit from attenuation from the large site buildings. Close-fitting, integrally mounted noise shell techniques and flexible mounts and dampeners will be used. This is subject to final design. The transformer and substation will be maintained in accordance with the PPMR to ensure adequate maintenance of all parts whose deterioration may give rise to increases in noise.	Low/Moderate Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant

Table 3: NMP Risk Assessment and Control Measures (Cont.)

Potential Source	Receptor	Pathway	Control and Mitigation Measure	Probability of Exposure	Consequence	Overall Risk
WTS Operations	NSRs in the local area – see Section 4	Releases to air	FCC is providing an on-site waste storage and transfer operation within a fully enclosed building during shutdown of one or both incinerator lines. The WTS building has been located to the east of the Installation away from sensitive receptors, such as residential areas. It is estimated that the WTS building will be utilised for 21 days per annum. Competent FCC personnel will oversee the waste delivery and tipping operations in the WTS building. All tipping will be undertaken internally. No waste treatment is proposed within the WTS building. During use of the WTS, the daily site inspections which includes noise monitoring will encompass this area and all employees will be made aware of the requirement to report any abnormal or excessive noise.	Low Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant
Operational activities in the Workshop and Parts Store	NSRs in the local area – see Section 4	Releases to air	Activities to be undertaken are not considered to generate significant noise emissions. All workshop activities will be undertaken internally during day-time hours and all equipment is subject to pre-use checks and is covered by the PPMR to prevent deterioration of plant and equipment which may lead to increase noise emissions.	Very Low Control measures will minimise noise emissions from reaching identified receptors.	Possible noise nuisance	Insignificant

5.5. Abnormal/Emergency Scenario Contingency Measures

5.5.1. In the event of an accident/unexpected incident such as fire, breakdown, extreme weather conditions and staff absences, the following emergency measures will be implemented on site to manage the risk of noise emissions. In exceptional circumstances, Senior Management will discuss whether to cease part or all of the site operations. The emergency contingency measures are detailed in Table 4.

Table 4: Abnormal/Emergency Scenario Contingency Measures

Emergency Scenario	Contingency Measures
Extreme weather conditions – high wind, humidity and temperature	During extreme weather conditions of high wind, humidity and temperature when noise complaints are more likely due to residents opening windows and doors, FCC will review scheduling of activities to investigate the possibility of undertaking those activities which do not involve noise generation during the night-time hours.
Fire/Explosion	The Fire and Rescue Service ("FRS") and the EA will be informed. FCC personnel will be instructed to implement the emergency procedures such as those detailed in the approved Fire Prevention Plan ("FPP"). Waste will not be accepted at the site until operations re-commence. Once the site or affected area is deemed safe by the FRS, repairs will be undertaken and/or replacement equipment will be sourced. Start-up of equipment will be undertaken gradually by trained personnel to ensure optimal performance of equipment prior to full commencement of waste activities.
Staff Absences	FCC has assigned responsible persons and deputies in the case of staff absence. At the start of each working day, the Site Manager will instruct the deputy in the case of staff absence to ensure all measures outlined in this NMP are undertaken. All employees will be fully trained in the NMP and nominated personnel are available to attend site out of normal working hours.
Breakdown or malfunction of the process line and site equipment	Staff will be alerted of any problems with the process and site equipment via system control panels and sounding of automatic alarms. Should the process or any associated site equipment fail or malfunction causing excess noise emissions, waste acceptance shall be monitored and ceased where necessary and certain processes isolated. Commencement of operations will only be permitted once the fault or malfunction has been rectified by qualified personnel.

6. COMMUNITY LIAISON AND RESPONSE TO COMPLAINTS

6.1. Community Liaison

6.1.1. FCC will maintain an open and transparent relationship with the local community.

6.1.2. Contact details are provided on the company website[2] including telephone numbers and a 'Contact Us' page. Site contact details will also be available from the security lodge and on a main entrance sign. FCC welcome correspondence using these provided methods of communication. If necessary, an FCC representative can also attend local community meetings.

6.2. Response to Complaints

Initial Response – Data Gathering

6.2.1. If a noise complaint is received either from a member of the public or the EA, the complaint will be fully investigated within 8 working hours. The EHS Manager will be responsible for leading the investigation and depending on the complaint, Senior Managers from Operations, Process Control and Engineering will be involved, as well as the appropriate Shift Manager.

6.2.2. FCC will request as much information as possible from the complainant, such as:

- date and time the problem was first identified;
- location of complainant;
- description of the noise to help identify the likely source of the noise; and
- frequency and/or intensity of problem.

6.2.3. This information will help inform and structure the investigation to be undertaken.

Noise Complaint Investigation

6.2.4. The investigation will include the following:

- undertaking a site inspection to establish whether any abnormal noise emissions can be identified and reviewing the completed noise monitoring findings at the time of the abnormal noise being experienced;
- viewing Closed Circuit Television ("CCTV") footage to determine what operations were being undertaken at the time, such as waste unloading, processing, vehicle movements or other raw material deliveries were occurring at the time to aim to establish the potential origin;
- speaking with operators and any contractors on site at the time of the event who may be able to provide further information regarding the occurrence or have observed the abnormal noise emissions;

[2] Company Website, available at: https://www.fccenvironment.co.uk/green-energy/#:~:text=We%20currently%20operate%206%20Energy,of%20valuable%20'green'%20energy, accessed September 2023.

- reviewing the noise monitoring records to confirm inspections have been completed and to note whether any abnormal activities or observations were recorded; and
- discussions with operators to establish any changes to normal operating condition, for example, any malfunction of equipment.

Noise Complaint – Corrective and Preventative Measures

6.2.5. Once the investigation has been completed and the complaint substantiated, FCC will determine and implement suitable corrective and preventative measures. The type and level of corrective and preventative measures will be dependent on the root cause and scale of the noise. Examples of the corrective and preventative measures may include:

- immediately ceasing of operations in areas of site where the abnormal noise emissions have been identified until preventative measures can be implemented; successfully;
- review and inspect all processing equipment and systems to ensure they are operating appropriately;
- undertake any maintenance required on equipment;
- investigate the need for any noise abatement; and
- further staff training on noise monitoring and control measures to be undertaken.

6.2.6. The EA will be informed of the noise complaint investigation findings and proposed corrective and preventative measures which have been implemented to rectify the situation.

Noise Complaint – Evaluation of Corrective and Preventative Measures

6.2.7. Daily housekeeping checks will be in place to ascertain whether the corrective and preventative measures above are successful in controlling and reducing noise emissions which will see a reduction in complaints. These inspections and associated findings will be recorded and reviewed during EHS Meetings.

Timescales

6.2.8. The timescales associated with the complaint procedures are as follows:

- investigate complaint – within 8 working hours;
- corrective measures – immediately or where specialist contractors are required within 1-2 working days; and
- preventative measures– within 5 working days.

Feedback to Complaints

6.2.9. FCC will discuss complaint investigation findings and the associated corrective and preventative actions which have been implemented directly with the complainant.

6.2.10. A visit to site will be offered to the complainant in order to walk through the process and to discuss the measures taken to reduce noise on site.

Records

6.2.11. NMP records are kept in accordance with the procedures established in the EMS. The type of information that will be recorded relates to:

- detailed description of the complaint received;
- the investigation findings including root cause;
- all corrective and preventative measures implemented; and
- evaluation of measures and complaint close out by Senior Management.

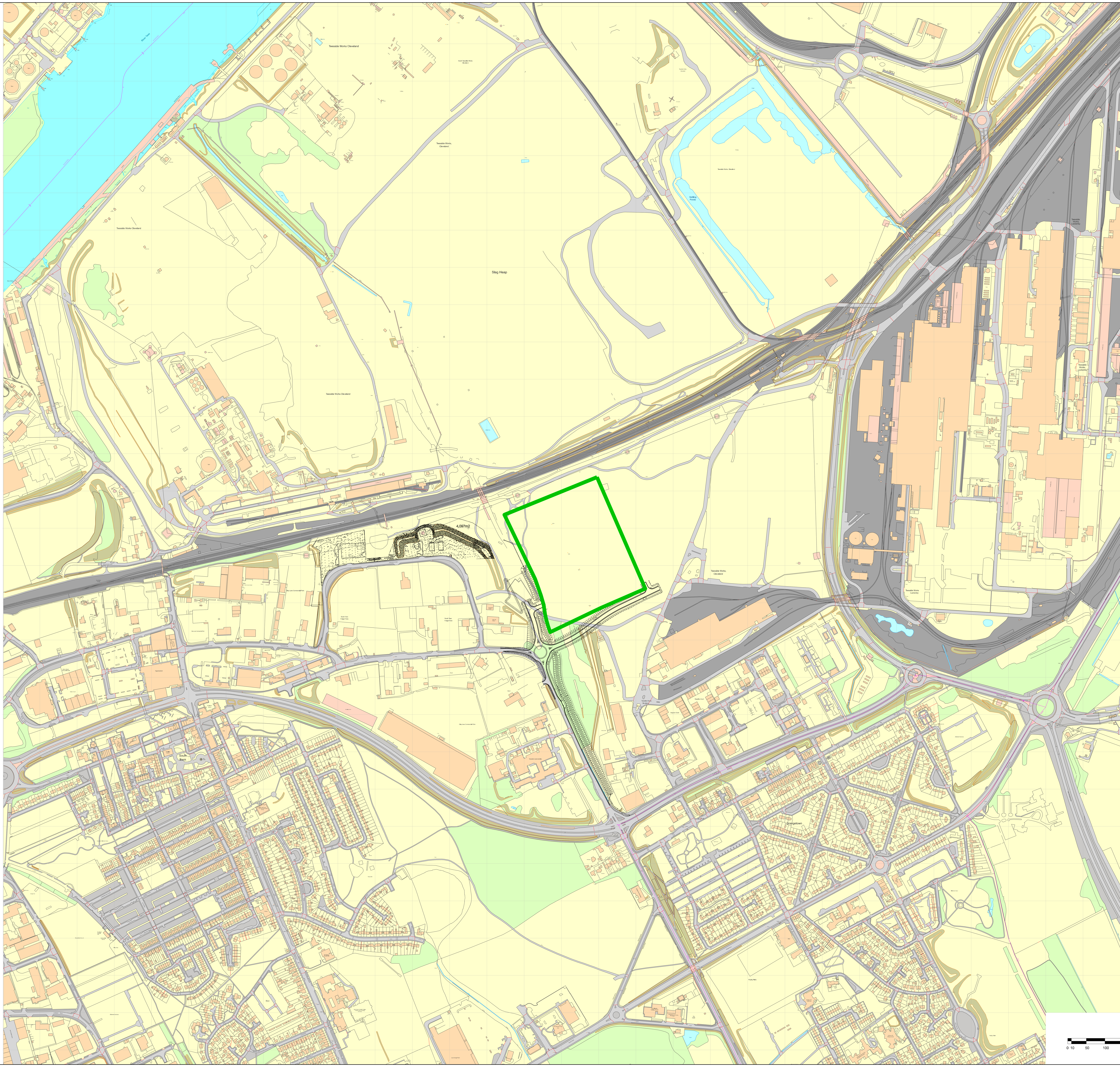
7. NMP REVIEW

7.1.1. The NMP will form part of the EMS and the continuing effectiveness of the NMP will be reviewed by Senior Management annually or in the event of the following:

- any surrounding land use changes and any future developments that may increase or alter the impact;
- any changes to site activities which have the potential to result in noise nuisance; and/or
- if a substantiated complaint is received and it is clear control measures have failed.

7.1.2. The reviews will take into account monitoring records, compliance records, complaints history, site records and any recent sensitive developments on neighbouring land. The plan will be amended as necessary, including any changes to the control measures.

APPENDIX I
DRAWINGS



N

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4. WHERE DISCREPANCIES EXIST BETWEEN REFERENCE OR ASSEMBLY DRAWINGS & DETAIL DRAWINGS, THE LATTER TAKE PREFERENCE.

KEY

Environmental Permit Boundary

Source:
41527104_9906_Red Line Boundary Plan 20210115
Received: 21/01/18

Site Access Highways

STDC_HWY-ATK-HML-PR-M2-CH-000001_P04_2D.dgn
Received: 21/02/12

John Boyle Road Mapping

John Boyle Road Topographical Survey A1 - Rev 2.dwg
Received 21/03/11

OS Mastermap

Purchased: 21/03/11

-	21/11/26	Issued for Information

FOR INFORMATION

GRP

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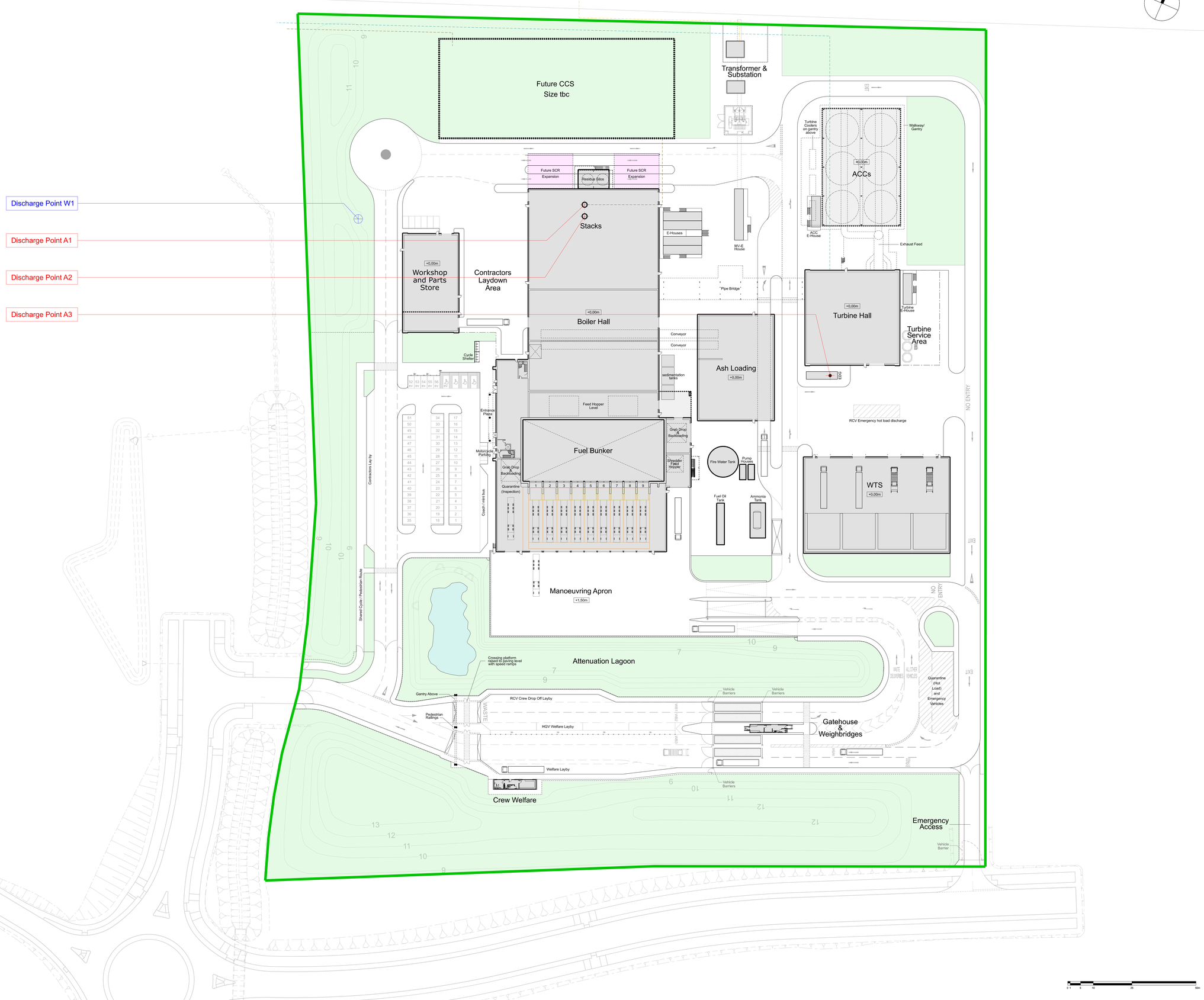
T +44 (0)1932 629139

GRANGETOWN ERF
PROJECT

Site Location Plan
DRAWING

0 10 50 100 250 500m

1:5000@A1 SCALE	21/11/26 DATE	
1425_EP001 DWG. NO.	- REVISION	CHECKED



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Environmental Permit Boundary

Substation Connection

CHP

D	23/07/18	Issued for Information
C	22/04/07	Issued for Information
B	22/01/10	Issued for Information

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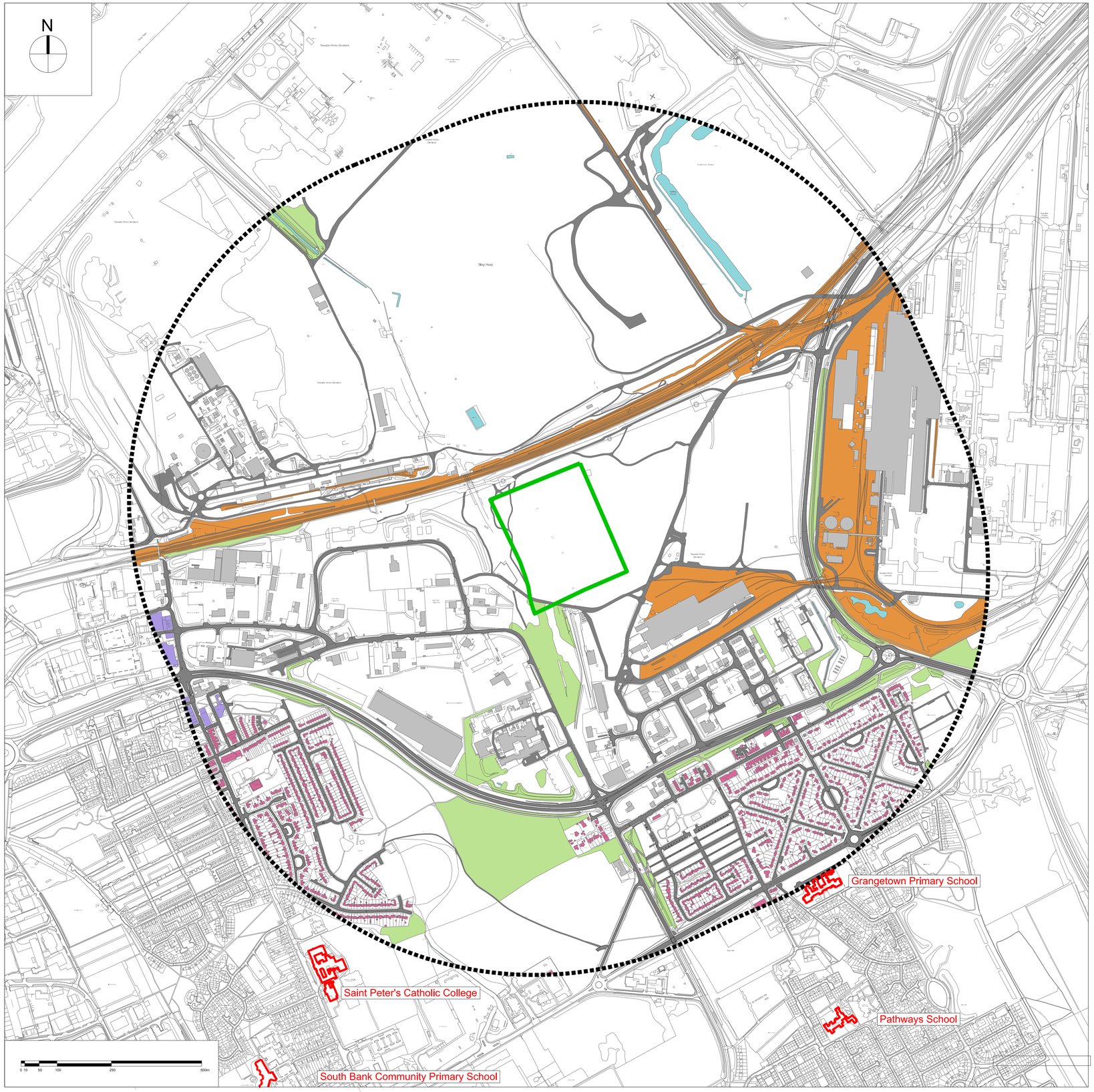
Grangetown Energy Recovery Facility
PROJECT

Site Layout
DRAWING

1:500@A0 SCALE | 23/07/18 DATE

1425_EP002 DWG. NO. | D REVISION | CHECKED

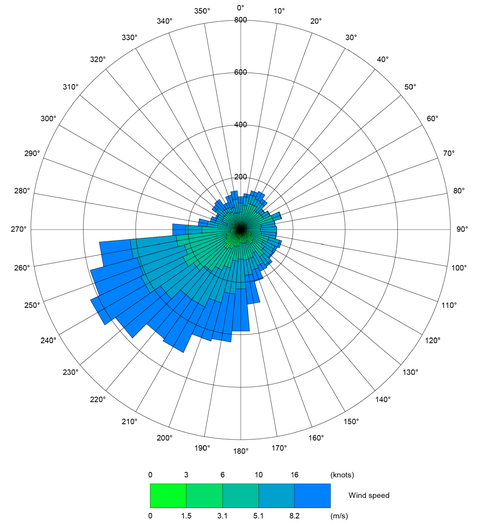


LEGEND

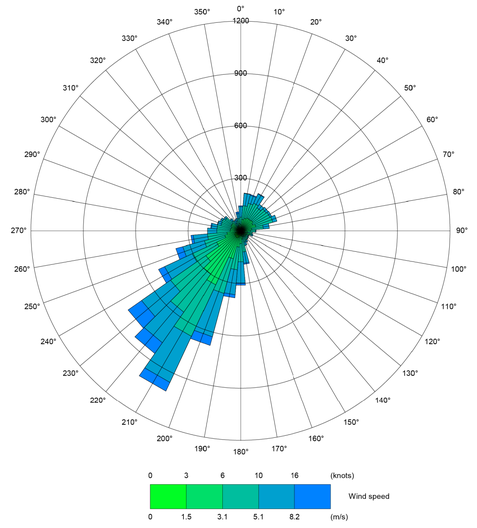
- ENVIRONMENTAL PERMIT BOUNDARY
- 1000m OFFSET BOUNDARY
- DOMESTIC DWELLINGS
- AREAS OF OPEN SPACE / PLAYING FIELDS
- COMMERCIAL PREMISES
- INDUSTRIAL PREMISES
- ROAD FEATURES
- RAILWAY FEATURES
- SURFACE WATER FEATURES
- SCHOOLS

WIND ROSES

Loftus - 2020



NWP - 2020



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Grangetown Energy Recovery Facility
PROJECT

Sensitive Site Receptors Plan
DRAWING

1:4000@A0	21/11/23
SCALE	DATE
1425_EP003	-
DWG. NO.	REVISION

CHECKED