NOISE & VIBRATION MANAGEMENT PLAN

Units 9 & 10, Vauxhall Industrial Estate, Ruabon, Wrexham LL14 6HA

New Horizon Biofuel and Animal Bedding Co Ltd

Version:	1.4	**Date:**	06 February 2022		
Doc. Ref:	VIE-2704-H	**Author(s):**	CP	**Checked:**	NHB
Client No:	2704	**Job No:**	012		

Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants

Oaktree Environmental Ltd, Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ
Tel: 01606 558833 | Fax: 01606 861183 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk
REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

Version	Issue date	Author	Checked	Description
1.0	20/05/2022	CP	NHB	Application copy
1.1	11/11/2022	CP	NHB	NRW comments
1.2	15/11/2022	CP	NHB	NRW comments
1.3	16/01/2023	CP	NHB	Updated operational hours
1.4	06/02/2023	CP	NHB	NRW comments

CONTENTS

List of Tables

List of Appendices:

Appendix I - Drawings

Drawing No. VIE/2704/03 –Site Layout & Fire Plan

Drawing No. VIE/2704/04 – Receptor Plan

Appendix II - Complaints Procedure and Recording Form

1 Introduction

1.1 Site history / background

1.1.1 Oaktree Environmental Ltd have prepared a Noise & Vibration Management Plan (NVMP) on behalf of New Horizon Biofuel and Animal Bedding Co Ltd for their site situated at Units 9 & 10, Vauxhall Industrial Estate, Ruabon, Wrexham LL14 6HA.

1.1.2 This NVMP will assess the risks arising from the site which will be used an A16a Hazardous Waste Physical Treatment Facility. The site will allow for the acceptance, storage and treatment of predominantly plastic waste for recovery. This document should be read in conjunction with the Noise Impact Assessment (NIA), Document Ref. VIE-2704-H also produced for this site.

1.1.3 The mitigation measures outlined in this NVMP will be put in place by the management of New Horizon Biofuel and Animal Bedding Co Ltd to ensure noise and vibration is controlled using Best practicable means (BPM) to ensure the receptors listed in Section 2.2 below are not adversely affected by the above proposals.

1.2 Site location

1.2.1 The site is located at Units 9 & 10, Vauxhall Industrial Estate, Ruabon, Wrexham LL14 6HA as shown on Drawing Nos. VIE/2704/01 & 02. The national grid reference for the site is SJ 30505 45326.

1.2.2 The site lies within a primarily industrial setting within the Vauxhall Industrial Estate with the nearest residential noise sensitive receptors are approximately 290m to the northwest on Ruabon Road, 320m northwest on Moreton Avenue and 300m north on Heol Kenyon.

1.3 Hours of operation

1.3.1 The site will be operated in accordance with the following hours:

- **Unit 9**= 24/7 Monday – Friday and closed Weekends and Bank Holidays.
- **Unit 10** = 24/7 Monday – Friday and closed Weekends and Bank Holidays.
- Both sites will be completely shut down for two days per month to provide a full operational clean up.

1.3.2 In the event that the site is closed or not in operation for any reason, the gates will be locked and secured to prevent unauthorised vehicular and/or pedestrian access and a 24-hour security presence will be maintained to monitor waste and product stocks.

1.3.3 The following operations will take place at the site during the following hours:

Table 1.1 – Operational hours and activities

Site activities	Operational hours	Comments
Waste acceptance and removal of plastic	Monday to Friday = 24/7 Saturday = Closed Sundays = Closed Bank/Public holidays = No operations	Plastic is delivered to the site in HGVs comprising articulated bulker wagons and 8-wheelers. All plastic accepted at the site will be either in bale form or within shrink wrapping on wooden pallets so the waste can be unloaded using a forklift truck. No waste is expected to arrive loose at the site and tipped on the floor.
Activities on Unit 9	As above operational hours	This site comprises the main hub for the facility and will include the use of mechanical mobile plant i.e. 360^0 excavators feeding the shredder which will feed into the wash plant. The fixed plant shown on Drawing No. VIE/2704/03 will also be in operation during these hours.
Activities on Unit 10	As above operational hours.	This site will only be used for unloading and loading of plastic containers using forklift trucks. No mechanical treatment will take place at this site.
Maintenance/housekeeping on Units 9 & 10	Monday to Sunday = 06:00 – 07:00 Monday to Sunday = 19:00 – 21:00 Bank/Public holidays = No operations	During these hours, operations will consist of removing of waste material which may have accumulated around the treatment plant during loading and returned to the relevant stockpile. This will also involve cleaning the fixed plant and removing any dust or fluff which may have accumulated during the working day. This will not involve using any mechanical machinery after the hours of 19:00. The only time mechanical machinery would be used after 19:00pm would be for an emergency situation i.e. a fire incident.

2 Sensitive Receptors

2.1 Receptor Plan

2.1.1 A sensitive receptors plan (SRP) has been produced to accompany this NVMP and is shown in Appendix I referenced as on Drawing No. VIE/2704/04. The receptors highlighted are those which are at risk by noise generated from the site.

2.2 List of receptors

2.2.1 The receptors illustrated in the Receptor Plan are detailed in the table below with approximate distances to them. Receptors which are over 500m have not been included within the table below as it is considered that they will not be affected by any noise pollution arising from the site.

Table 2.1 – Distances to Selected, Representative Sensitive Locations

Boundary	Receptor	Approximate distance from site boundary (m)
Southwest	Residential properties to the west of Ruabon Road	320
Northwest	Residential properties to the west and east of Ruabon Road	300
Northwest	Further residential properties off Brandy Brk	405
Northwest	Further residential properties off Moreton Avenue	290 - 340
Northwest	Residential properties off Hafod Wen and Ddyfrdwy	320 - 500
North/northwest	Further residential properties off Heol Kenyon	300 - 450
Southeast	New Hall Independent Hospital	400

2.2.2 Other receptors not listed in the above table are clearly shown on Drawing No. VIE/2704/04.

2.3 Other noise sources

2.3.1 Other industrial / commercial land uses which will contribute to the background noise level are tabulated below in Table 1.4 below.

Table 2.2 – Other Noise Emitting Operators

Company	Address	Type of Business	Approximate distance from site boundary (m)
N/A	Various uses on the Vauxhall Industrial Estate	Various industrial and commercial properties	Adjacent
HK Motors & I Hayward	Gardden View, Ruabon, Wrexham LL14 6RG	Waste	435
Enovert Hafod LFG Site	101 Bangor Rd, Johnstown, Ruabon, Wrexham LL14 2SS	Waste	200

2.3.2 The predominant use of the above properties will contribute to the background noise of the area due to the following activities:

- Use of articulated HGVs egressing the sites on a 24/7 basis
- Using mobile plant and manoeuvring of vehicles and other machinery on the sites.

2.3.3 Other sources of noise comprise birdsong, the railway adjacent to the east and noise generated by other vehicle movements on highways and other surrounding roads

3 Site Operations

3.1 Waste deliveries

3.1.1 Waste is delivered and removed from the site via the existing access to the north of the site which is a concrete road. Upon arrival, an operative will direct the driver to the relevant area on site where the contents of the vehicle and waste transfer /consignment note are inspected.

3.1.2 Deliveries/removals from the site primarily consisting of Ltd.'s own vehicles/contracts but there will be third parties who send vehicles for removal of waste and product. These vehicle types are shown below:

- HGV skip vehicles
- fixed body bulk loaders with a number of smaller deliveries of plastic
- 8-wheeled tipper vehicles which can carry loads of up to 18-20 tonnes
- Articulated Lorries.

3.2 Waste acceptance

3.2.1 Waste delivered to the site via an existing access to the north and upon arrival all waste will undergo a visual inspection on arrival at site prior to progressing through to the operational areas. Once the vehicle has passed the initial inspection, the waste consignment notes (including hazardous) and transfer documentation will be fully checked to ensure the waste matches the pre-acceptance information received.

3.2.2 Any wastes identified during the incoming waste inspections which do not conform to site acceptance criteria will not be accepted and/or removed and quarantined immediately to await safe removal from site and NRW will be contacted (where necessary) if the non-conforming waste discovered is likely to lead to a breach of permit conditions or a potential risk of combustion. The majority of all waste delivered to the site will comprise New Horizon Biofuel and Animal Bedding Co Ltd's own vehicles so it is unlikely loads will be rejected.

3.3 Site infrastructure

3.3.1 The site infrastructure proposed at the site is clearly detailed on Drawing No. VIE/2704/03 which is shown in Appendix I of this NVMP. The drawing illustrates the location of plant, machinery and stored wastes across the site.

3.4 Site processes

3.4.1 The layout of the waste treatment processes on site are shown on Drawing No. VIE/2704/03. A summary of the process is presented below:

- **Waste Reception –** Once accepted, waste will be brought onto site and directed to the one of the three reception bays (**AREAS 1 - 3**), these areas will be used to carry out a full check by the site chemist and/or site management on the waste received to demonstrate:

    i) Whether the waste is non-hazardous or hazardous
    ii) Whether the waste is suitable for treatment

- The drums/containers will be segregated into hazardous (**AREA 4**) and non-hazardous container (**AREAS 1 – 3 or 6 - 7**) so the operator can adhere to maximum treatment/storage capacities for non-hazardous and hazardous wastes.
- Non-hazardous containers following review by the site chemist will be deposited into **AREA 6 - 7** to await treatment into the wash plant or remain in **AREAS 1 – 3** if the area is full.
- **AREA 8** will be for acceptance and storage of non-hazardous plastic bales and other non-hazardous plastic containers prior to being treated in the wash plant.
- For any hazardous containers, these will be stored in **AREA** 4 then washed manually in **AREA 5** to remove the containers of any hazardous substances, once they have been assessed by the site chemist and are suitable for processing, they will be transferred to **AREAS 6 – 7** prior to treatment into the wash plant.
- Once loaded into the wash plant, the waste will be subject to the following treatment methods:

iii) **Shredder/pre-wash –** The shredder reduces the size of the material and then feeds into a covered incline conveyor where it will undergo a pre-wash.

iv) **Sink float separation –** Once undergone a pre-wash the material will then be further conveyed into a sink/float separation process to separate the light from heavy plastic.

v) **Friction cleaner/dehydrator –** The material will be transferred to the friction cleaning device which will clean and reduce the moisture content of the plastics by dehydrating it.

vi) **Second sink float separation –** Material will then be fed into a second sink float separation process which will remove any non-conforming or residual waste such as labels and other packaging from the plastics.

vii) **Bagging** - The product at the end of the line will then be bagged, weighed and labelled for despatch. The materials will be held on site until a sample and analysis of the material is taken and completed and removed off site as product.

3.4.2 In terms of the material stored in **AREA 9**, this will contain non-waste virgin timber acting as feed for the Biomass Boiler or Pelleting Plant. The two items of plant will not run simultaneously and will be operated depending on demand for the product.

3.4.3 Approximately every 6 weeks both wash plant and water filtration system will be completely cleaned and emptied then new water will pumped back into the system. Following a load of hazardous containers being sent through the wash plant, the system will be cleaned prior to non-hazardous being fed into the plant.

3.5 Mobile plant and equipment

3.5.1 All mobile plant on site is subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts.

3.5.2 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis i.e. daily, before, during and 1 hour at the end of each working day using a checklist similar to that in Appendix II to ensure the following:

- Mobile plant is mechanically sound for use and no presence of black fumes or trailing liquids visible prior to use or following shutoff of plant/equipment.
- In the building, all plant will be powered down and completely shut off prior to cessation of operations on any given day.
- Plant which is not in use for any extended period is stored at least 6 metres from combustible or flammable material.
- All mobile plant will contain firefighting equipment inside.
- Dust from processing/treatment operations on site can settle throughout the working day onto processing plant, plant exhausts and engine parts so a fire-watch will be implemented after cessation of works and equipment powered down for 1 hour each day to remove any dust/fluff using brushes, hoses etc... Any build of dust/fluff will be removed from the equipment and deposited into an adjacent refuse bin which will be emptied when full.

3.5.3 In addition to the above, fleet lorries are brake checked every 6 weeks along with routine serving as per compliance with the Traffic Commissioner.

4 Noise Management and Controls

4.1 Noise Sensitive Receptors

4.1.1 The nearest residential noise sensitive receptors are approximately 290m to the northwest on Ruabon Road, 320m northwest on Moreton Avenue and 300m north on Heol Kenyon.

4.1.2 The proposed operation and layout of the site has been planned in order to contain all the required operations and activities within the site, thus limiting the impacts from noise on the above receptors.

4.1.3 In terms of potential noise impact, whilst the development proposed will be operated using the Best Practicable Means at all times, this site-specific NVMP has been prepared in order to ensure the noise levels at the site can be managed appropriately and reduce any impact on the surrounding receptors.

4.2 Noise Sources

4.2.1 The main sources of noise which could arise from the site operations are as follows:

a) Vehicles travelling to and from the site for delivery / collection of waste and product
b) Loading of waste into mobile shredder using grab/excavator
c) Use of shredder
d) Use of the wash plant
e) Manoeuvring of mobile plant around external areas of the site
f) Small vehicles travelling to and from the site (e.g. staff and visitor's cars, courier van deliveries etc.)
g) Repairs/housekeeping
h) Site operations taking place outside of normal operating hours when background noise levels are likely to be lower comprising operating the wash plant during evening hours

4.3 Noise Management Table

4.3.1 A site-specific NVMP table overleaf details the above noise sources and how the current and proposed infrastructure on site will reduce the impact of noise to surrounding properties.

4.3.2 In addition to the existing controls in this NVMP, the complaints procedure further discussed in section 5 will be used in the event that any noise complaints are received. If a noise complaint is received and the applicant has been made aware, immediate action will take place reviewing and identifying whether any changes to existing procedures are required or if new procedures need to be put in place. Any changes which may be required will be implemented immediately.

Source(s)	Receptor(s)	Consequence	Magnitude of noise source	Characteristic of noise source	Probability of noise disturbance	Remedial Action / Recommendations / Comments	Assessment Outcome following actions / recommendations
A = Vehicles travelling to and from the site for delivery / collection of waste and product	See Section 2.2	Noise pollution	Medium	Continuous (Low Pitch)	Medium	Engines will be switched off when the vehicles are not being used. Waste deliveries and collections will only be permitted during the hours of 07:00 – 19:00 Monday – Friday and no deliveries on Saturdays, Sundays or Bank/Public Holidays. These hours are considered 'normal' working operational hours. The existing access road to the site will be maintained in good state of repair to prevent unnecessary noise being generated. All vehicles operated by New Horizon Biofuel and Animal Bedding Co Ltd be fitted with chain socks in order to reduce the noise produced by the loose chains banging on the side of the skip. Implementation of a 5mph speed limit onsite. Drivers must lower the tipper body before driving away from the tipping area. All drivers are required to enter and exit the site with due consideration for neighbours. Drop heights will be a maximum 1m from the ground to allow for clearance of the relevant vehicle. Management will ensure that all vehicles involved in the tipping of waste operated by New Horizon Biofuel and Animal Bedding Co Ltd are functioning suitable i.e. vehicles must be well maintained and operated with silencers and moving parts to be regularly lubricated. All plastic accepted at the site will be either in bale form or within shrink wrapping on wooden pallets so the waste can be unloaded using a forklift truck. No waste is expected to arrive loose at the site and tipped on the floor. All waste being removed from the site is expected to be in bulk bags which can be loaded into a vehicle using a forklift truck without the noise of heavy plant i.e. loading shovels being required. All mobile plant and other vehicles used will benefit from white noise reverse alarms. A no idling policy will be in place and staff/third party drivers will be told not to rev engines.	Low due to background noise levels being high

Source(s)	Receptor(s)	Consequence	Magnitude of noise source	Characteristic of noise source	Probability of noise disturbance	Remedial Action / Recommendations / Comments	Assessment Outcome following actions / recommendations
D = Loading of waste into mobile shredder using grab/excavator C = Use of shredder D = Use of the wash plant	See Section 2.2	Noise pollution	Medium	Continuous (Low Pitch)	High	Refer to the above actions shown in A and additional actions/proposals are shown below. The loading of waste into shredder is done using a 360^0 grab as opposed to a loading shovel meaning the material can be inserted into the plant with minimal drop height to prevent any crashing, banging or vibration. It is proposed to operate the shredder between the hours of 07:00 – 19:30 which are not considered unsociable hours. The shredder is only likely to operate periodically throughout the day as it can process up to 5-10 times more than what the wash plant can process. In terms of the wash plant, this will be operated with the roller shutters closed. There are large industrial warehouses and industrial activities taking place between the site and thew nearest sensitive receptors. Management will ensure that all loading plant operated by New Horizon Biofuel and Animal Bedding Co Ltd is functioning suitably i.e. moving parts to be regularly lubricated. Operatives will be informed to turn off engines of the mobile plant when it is not in use and no revving of engines will be permitted at the site. Any malfunctions in plant i.e. missing screws/bolts which result in excessive noise will be de-commissioned until an alternative loading plant sourced.	Low
E = Manoeuvring of mobile plant around external areas of the site	As detailed on Sensitive Receptors Plan	Noise pollution	Low	Intermittent (Low Pitch)	Med	Refer to the above actions shown in A and additional actions/proposals are shown below. Management will ensure that all site vehicles operated by New Horizon Biofuel and Animal Bedding Co Ltd are functioning suitable i.e. vehicles must be well maintained and operated with silencers and moving parts to be regularly lubricated. All manoeuvring areas using mobile plant are surfaced with impermeable concrete which is generally flat and well maintained to prevent unnecessary banging of vehicles on uneven ground leading to excessive vibration. All vehicles will be fitted with white noise reversing alarms.	Low

Source(s)	Receptor(s)	Consequence	Magnitude of noise source	Characteristic of noise source	Probability of noise disturbance	Remedial Action / Recommendations / Comments	Assessment Outcome following actions / recommendations
F = Small vehicles travelling to and from the site (e.g. staff and visitor's cars, courier van deliveries etc.)	As detailed on Sensitive Receptors Plan	Noise pollution	Low – Very Low	Intermittent (Low Pitch)	Low	All those working on and visiting the site to be made aware of need for considerate driving and keeping vehicles well maintained. Small vehicles are not considered to be an issue in relation to excessive noise which could cause a complaint. Implementation of a 5mph speed limit onsite. All drivers are required to enter and exit the site with due consideration for neighbours.	Very Low / Negligible
G = Repairs	As detailed on Sensitive Receptors Plan	Noise pollution	Very Low	Occur at a specific time (Low Pitch)	Low	If repairs to the site are required, the work is to be undertaken with due regard for the possible noise nuisance and during working day hours. The proposed servicing building will be the main place where repairs are carried out and will provide attenuation from the walls. The building has roller shutters which can be closed in the event of any repairs considered 'noisy' are required. In the event of major repair work being undertaken which is likely to cause significant noise and disruption, neighbouring residents and NRW will be notified in advance and would not commence without agreement unless in extenuating circumstances i.e. to minimise a fire occurring.	Very Low / Negligible
H = Site operations taking place outside of normal operating hours when background noise levels are likely to be lower comprising operating the wash plant during evening hours	As detailed on Sensitive Receptors Plan	Noise pollution	High	Intermittent (Low Pitch)	Med / High	The only plant/vehicles in use would be the wash plant and forklift trucks. The shredder and excavator would not operate in evening hours. Implementation of a 5mph speed limit onsite to reduce excessive noise. All drivers are required to enter and exit the site with due consideration for neighbours. All mobile plant and other vehicles used will benefit from white noise reverse alarms. A no idling policy will be in place and staff/third party drivers will be told not to rev engines. Staff are aware not to rev engines once they are switched on. Staff will inspect the vehicle at the end of the working day and also before turning the vehicle on in the morning to ensure no unnecessary noise from the vehicle is produced.	Low

4.4 Monitoring

4.4.1 It is proposed that any offsite monitoring would primarily comprise the subjective onsite observations by site management. Given that the noise assessment has determined that proposed noise levels associated with the proposed operations are unlikely to significantly exceed the background level it is difficult to justify the requirement to undertake routine pro-active offsite monitoring.

4.4.2 There are various properties on the industrial estate which carry out noisy activities but as the activities vary on a day-by-day basis, it would make it difficult to assess any measurements made at the NSR during the site's operation i.e. what amount of the noise level may be apportioned to the site. To have any certainty in evaluating the true noise level as a result of the operations at the receptor measurements would have to be made during time of inactivity at neighbouring sites. This would introduce a great level of difficulty and eradicates the opportunity to arrange for a routine, weekly time for noise monitoring.

4.4.3 It would seem reasonable to propose that noise levels are subjectively monitored by site management. Site management will be able to monitor noise levels throughout the day whilst onsite and would notice a rise in noise levels because of plant failure, staff negligence, incompatible loads or other extenuating circumstances. If site management identify these issues, the operator they can then take steps to remedy the situation (i.e. cease the activity if needed). Should a noise a complaint be received, site management would review the nature of the complaint, and should it be deemed necessary (i.e. numerous complaints relating to a particular item of plant) then an investigation may be commenced and advice sought from a professional acoustician.

4.5 Recording

4.5.1 Site management will record complaints in the site diary or complaints report from in Appendix II and contract NRW within 24 hours if a complaint is received.

4.5.2 Site management will be required to make a note of any unavoidable events such as plant failure, in the site diary, rather than just actual complaints received and notify

NRW within 24 hours. This will ensure that if complaints are received retrospectively from either NRW or directly, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed (or, at least, in part) to the cause of the complaint. Where all appropriate measures fail to prevent an activity causing unacceptable levels of noise pollution, the activity will be stopped.

4.6 Emergencies

4.6.1 In the event of any unforeseen circumstances i.e. faulty equipment, the site manager will make an assessment of whether to cease activities/all operations with the main emphasis on site will be to reduce any noise impacts.

5 Actions when complaints are received

5.1 Complaints procedure

5.1.1 If any noise complaints are received, site management will complete a 'complaints and events log' and detailed individually on the complaints form (in Appendix II), both of which will be kept for inspection on request by the LA, NRW or third parties. Details of information to be completed are dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum).

5.1.2 Noise complaints will be prioritised and investigated without delay or by end of working day only in extenuating circumstances. This will also apply to complaints received both directly and via other sources (e.g. NRW or local authority). Where investigation substantiates the complaint, fully or partially, then remedial action will be taken immediately and if measures taken fail to stop the pollution then the activity must be stopped and not restarted unless and until additional measures have been implemented to prevent the emission causing pollution. NRW will be contacted in the event the complaint cannot be escalated. Following a complaint and if it is deemed correct following investigation, the appropriate action will be taken to prevent the issue from reoccurring i.e. evaluation of current abatement measures, site operations, additional abatement measures and re-training of staff via toolbox talks.

5.1.3 The operator will make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/NRW or third parties, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed to the cause of the complaint.

5.1.4 It must be noted that the site lies adjacent to a noisy property to the north, so in the event of a complaint, the operator will substantiate the complaint by carrying out noise monitoring to identify whether the complaint is valid. If the complaint is valid, the site

will implement the complaint procedures check and if required, amend site operations and provide additional attenuation around the site. This would involve using a level 2 sound meter and comparing this information from the background levels recorded from the recent Noise Impact Assessment.

5.1.5 If the source cannot be ascertained with 100% confidence, site management will either suspend or reduce the likely noise generating activities, i.e. cutting, shearing/baling.

5.1.6 If the source is within the site's control, site management will take appropriate action to ensure the issue has been rectified. This may take the form of the following:

a) Investigating the source to prevent a re-occurrence.
b) Suspending operations which are giving rise to excessive noise due to potential plant malfunction
c) Investigate noise mitigation measures
d) Logging findings of a – c in the site diary / complaints form and also in the reporting template within the EP.
e) Report actions to the complainant and/or NRW within 24 hours.
f) If following the above complaints are still received, the site will cease operations until the issues have been rectified.

5.1.7 NRW will be notified by email of any third-party noise complaints received within 24 hours including the complainant and the outcome of the investigation. Where complaints are substantiated as causing or likely to cause significant noise pollution, then NRW will be notified.

5.2 Complaints recording

5.2.1 Any complaints received in relation to noise and vibration will be recorded on the form shown in Appendix II. This form will normally be completed, signed and dated by site management, if they are not available, another suitably trained staff member.

5.2.2 The following details as a minimum will be completed on the form:

a) The name, address and telephone number of the caller will be requested.

b) Each complaint will be given a reference number.

c) The caller will be asked to give details of:

- the nature of the complaint;
- the time;
- how long it lasted;
- how often it occurs;
- is this the first time the problem has been noticed; and,
- what prompted them to complain.

d) The person completing the form will then, if possible, make a note of:

- the weather conditions at the time of the problem (rain snow fog etc.)
- strength and direction of the wind; and,
- the activity on the installation at the time the noise, dust or odour was detected, particularly anything unusual.

e) The reason for the complaint will be investigated and a note of the findings added to the report.

f) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.

g) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be referred to the appropriate department of the NRW or Local Council.

h) Following any complaint, the complaints procedure will be reviewed to see if any changes are required or if new procedures need to be put in place.

6 Training

6.1 Training regime

6.1.1 All employees and sub-contractors of New Horizon Biofuel and Animal Bedding Co Ltd involved with potentially noisy operations will receive training in noise and vibration monitoring and complaint reporting.

6.1.2 Training will be given to all relevant persons to make sure they are competent in completing noise and vibration survey forms, noise and vibration complaint report forms and the site diary to ensure sufficient monitoring of noise and vibration can be carried out and any problems addressed correctly.

6.1.3 When selecting new plant and equipment, consideration shall be given to the need to meet all legislation and statutory guidance on noise levels and to minimise levels of noise from selected equipment.

6.2 Vehicle / plant preventative maintenance training

6.2.1 This training is provided specifically for the vehicle and plant operators in order to ensure that all plant and machinery is checked regularly to prevent any occurrences which may lead to any adverse impacts on the environment or human health.

6.2.2 Training will be based on the preventative maintenance schedule supplied by the plant/equipment manufacturer.

6.2.3 The same training will be provided to senior management enabling a dual-level maintenance programme.

6.3 Liaison with Neighbours

6.3.1 In the extreme event of a significant, but temporary, increase in noise and vibration from the site, neighbours will be contacted to advise them of the occurrence and action being taken to remediate the issue on site.

6.3.2 An open-door policy will be encouraged by the operator to enable any complaints from neighbouring premises (if received) to be dealt with immediately. The complainant will then be supplied with remedial actions taken and any procedures or measures put in place by the operator to reduce or ideally eradicate the likelihood of a subsequent complaint.

7 Conclusion

7.1 Summary

7.1.1 The operator is prepared to invest a significant amount of expenditure at the site to ensure operations can continue in the future to prevent and minimise any noise disturbance which could arise from the site.

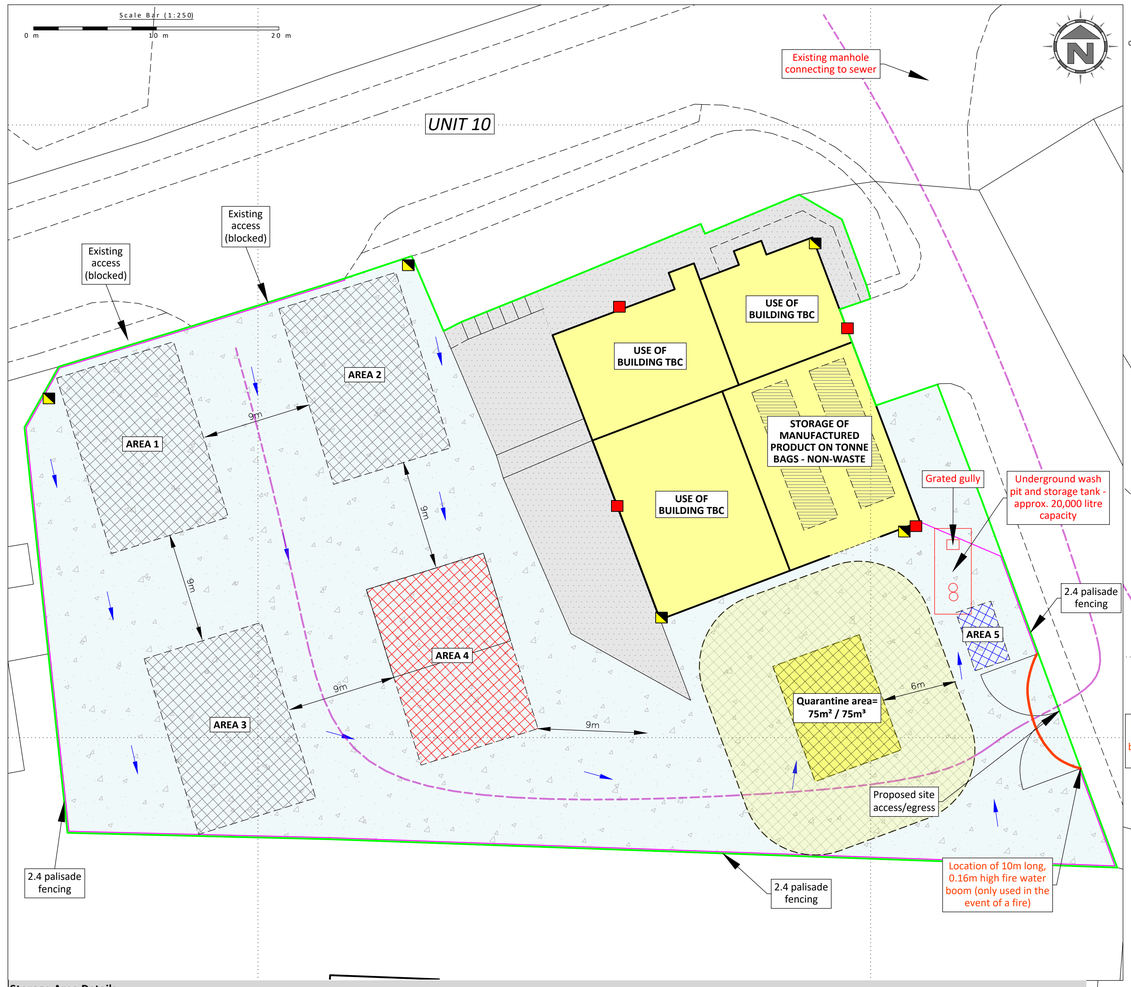
7.1.2 The operator will inform the nearest residential receptors of the proposed variation and how the proposed site infrastructure will reduce any noise and vibration pollution arising at the site.

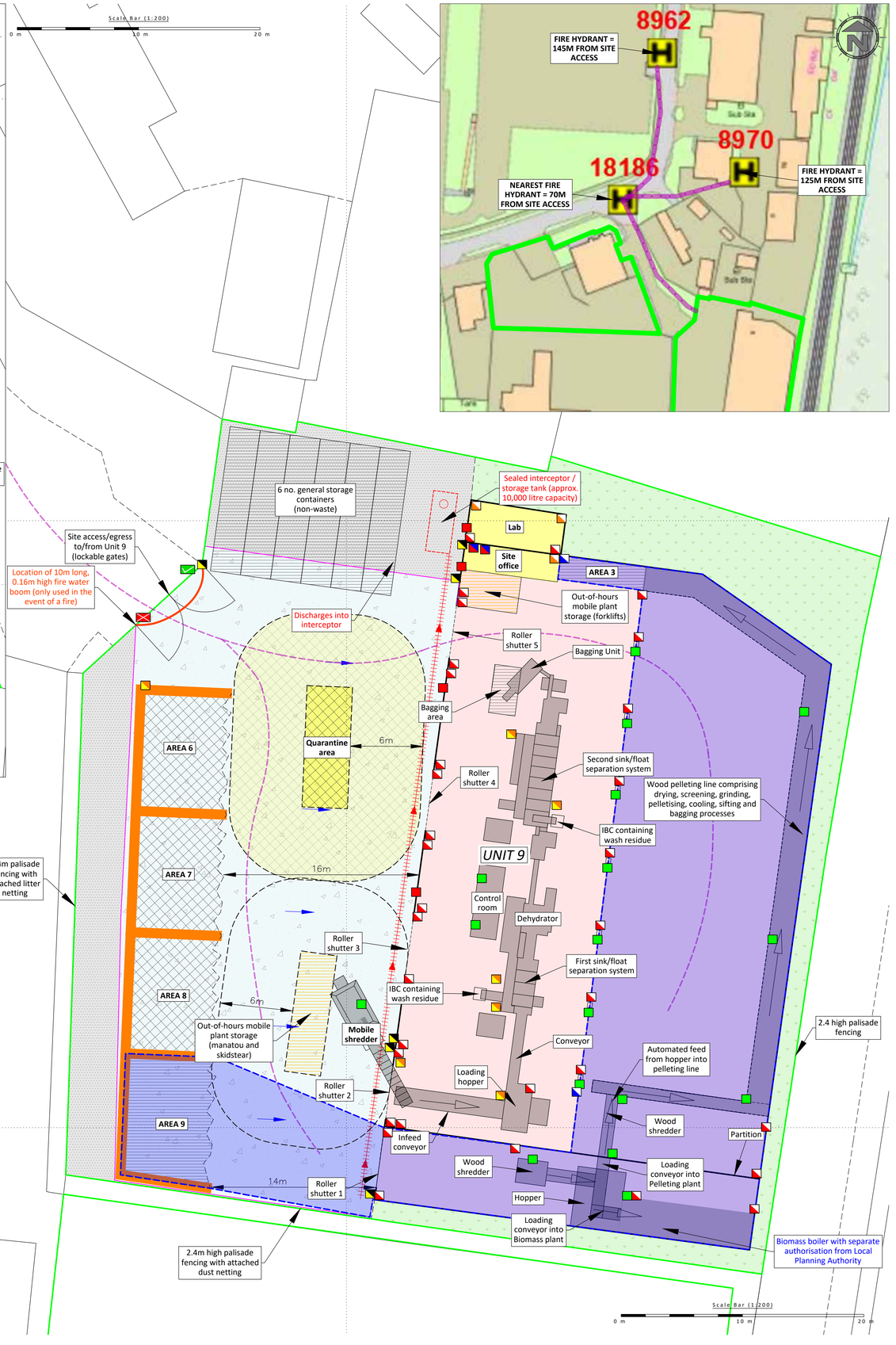
7.1.3 Consideration must be given to the fact that an existing portion of the site has been used as a scrap yard in some form for over 100 years and residents must have been aware of this site before purchasing their property.

7.1.4 The operator employs up to 25 full time staff and it is critical to the village of Assington that the site continues to operate during the proposed variation application of this permit.

Appendix I

Drawings





Storage Area Details

Plan Ref	Description	Storage type	Containment / type	Height of firewall (m)	Max width (m)	Max length (m)	Max height (m)	Max area (m)	Conversion factor used	Max volume (m3)	Max storage time	Comments
AREAS 1 - 3	Waste acceptance and inspection area for plastic containers	Unprocessed plastic containers /drums / IBC'S	N/A - Freestanding	N/A	15	10	1	150	1	150	<1 week	It must be noted that the containers/drums are likely to be empty so the actual tonnage will be low and the self-combustion risk is extremely low
AREAS 4	Hazardous plastic container storage	Unprocessed plastic containers /drums / IBC'S	N/A - Freestanding	N/A	15	10	1	150	1	150	<1 week	As above - containers deemed hazardous by the site chemist
AREA 5	Containing washing area	As above	As above	N/A	5	3	1	15	1	15	<10 hours	Containers undergo full inspection and washed of any hazardous residues; area clear out-of-hours
AREA 6	Non-hazardous plastic containers	Unprocessed plastic containers/drums	3-sided concrete firewall bay	3.2	10	7.5	2	75	1	150	<1 week	See AREAS 1 - 4 comments
AREA 7	Non-hazardous plastic containers	Unprocessed plastic containers/drums	As above	3.2	10	7.5	2	75	1	150	<12 hours	As above and actual pile size would be much less as waste will constantly be moving
AREA 8	Non-hazardous plastic bales/bags	Mixture of mechanical sorting and processing	As above	3.2	10	7.5	2	75	1	150	<12 hours	N/A
AREA 9	Virgin timber / wood feed for biomass and pelleting plant (non-waste)	Mixture of mechanical sorting and processing	As above	3.2	10	7.5	2	75	1	150	<12 hours	N/A
CONVERSION FACTORS												
Conversion factors for waste piles are worked out using the following methods set out by Natural Resources Wales												
The maximum length & width of pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x relevant conversion factor												
Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/bale stacks												
Conversion of rectangle + pyramid for waste stored within a bay (approx. 0.75)												
Conversion of pyramid volume for waste stored in a free-standing stockpile (approx. 0.333)												
For areas containing skips, conversion is calculated by volume of each skip x number of skips												

NOTES

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	02.06.21	CP	Initial drawing
A	09.09.21	CP	Updated layout / client comments
B	11.10.21	CP	Updated layout / client comments
C	21.02.22	CP	Updated layout / NRW comments
D	26.09.22	CP	Updated layout / NRW comments
E	11.11.22	CP	Updated layout / NRW comments

Key:

- Permit boundary
- Area covered by Part B Authorisation with LPA and not part of permitted operations
- Combustible waste storage areas
- Combustible waste storage areas (hazardous)
- Product storage non-waste
- Out-of-hours mobile plant storage
- Waste recycling buildings
- Concreted areas
- Other buildings (offices, etc.)
- Stone surface / free draining
- Landscaped/grass areas
- Location of fixed & mobile plant (indicative)
- Interlocking concrete fire walls (minimum 0.6m thick)
- 0.15m high concrete kerbing/seal
- Mains water point
- Spill kit
- Fire fighting equipment (extinguishers, etc.)
- Fire water containment / pollution control equipment i.e. booms, drain mats, drain plugs etc..
- Protective clothing location
- Access routes for emergency vehicles and site plant manouevring areas
- Fire alarm
- Surface water fall direction
- Foul (contaminated) water drainage
- Foul manholes
- Plant shut off
- Fire assembly point
- CCTV cameras (indicative)
- Infrared/heat detection cameras
- Emergency services box

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

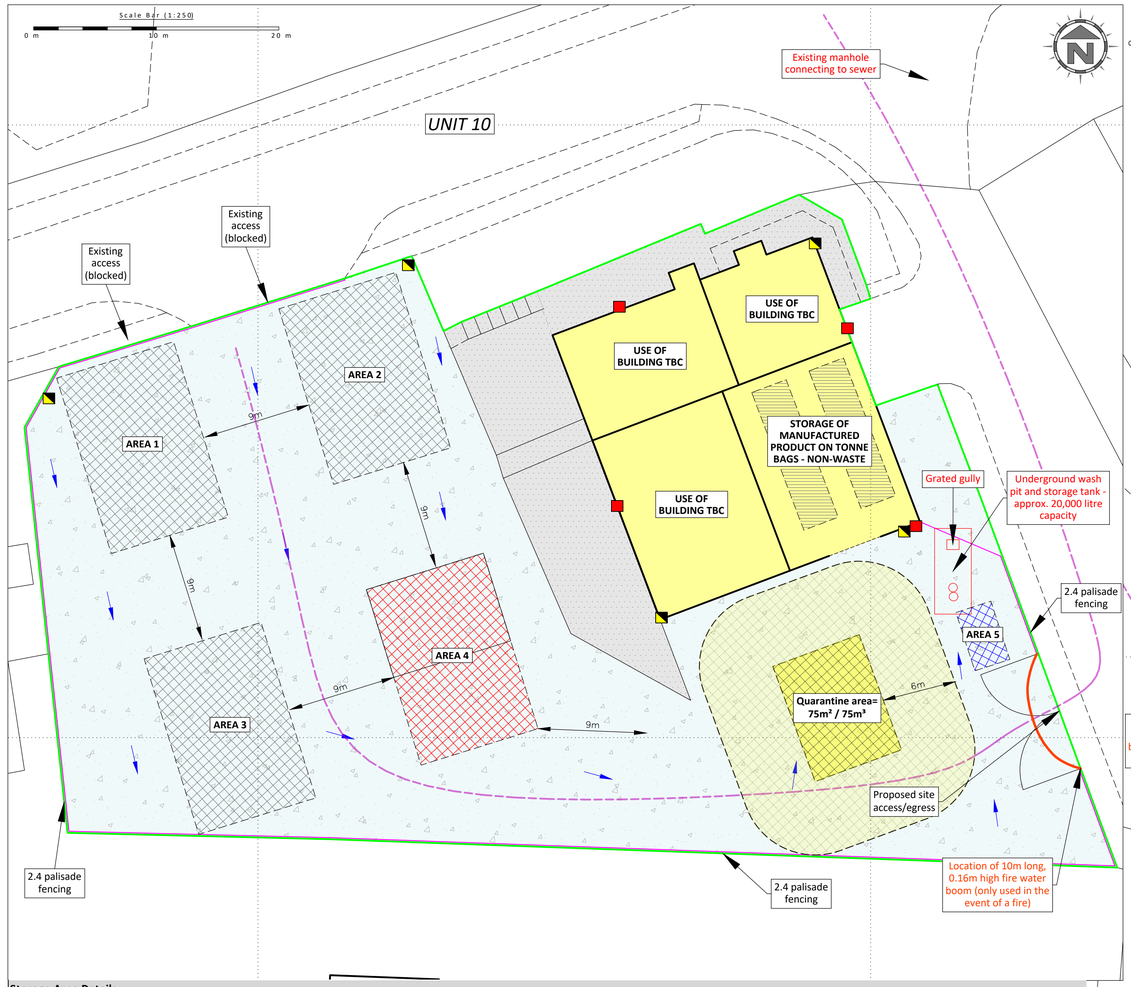
DRAWING TITLE
SITE LAYOUT & FIRE PLAN

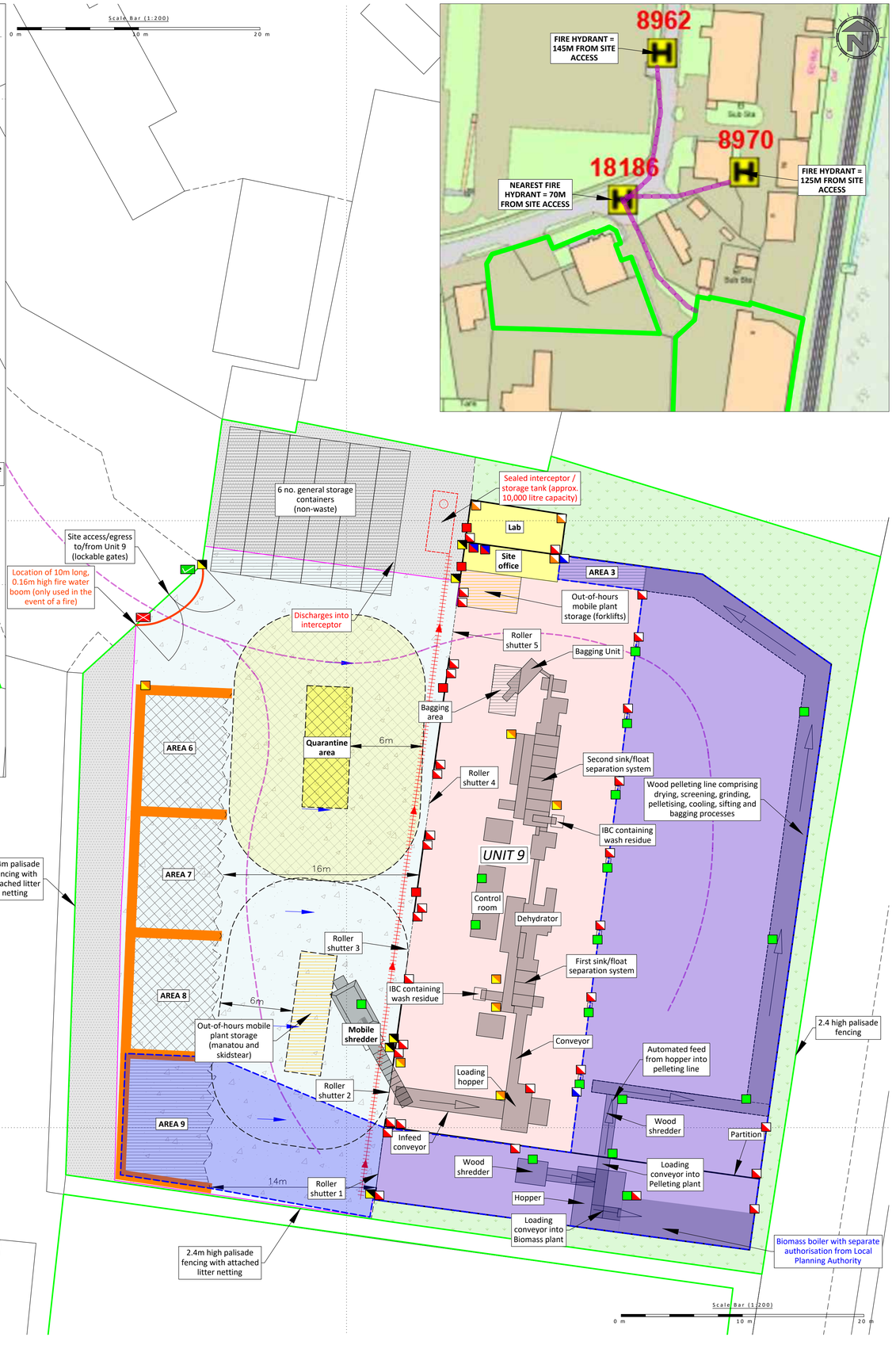
CLIENT
New Horizon Biofuel and Animal Bedding Co Ltd

PROJECT/SITE
Units 9 & 10, Vauxhall Industrial Estate, Ruabon, Wrexham LL14 6HA

SCALE @ A1	CLIENT NO	JOB NO
1:200	2704	012
DRAWING NUMBER	**REV**	**STATUS**
VIE/2704/03	E	Issued
DRAWN BY	**CHECKED**	**DATE**
CP	PT	11.11.22

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk





Storage Area Details

Plan Ref	Description	Storage type	Containment / type	Height of firewall (m)	Max width (m)	Max length (m)	Max height (m)	Max area (m)	Conversion factor used	Max volume (m3)	Max storage time	Comments
AREAS 1 - 3	Waste acceptance and inspection area for plastic containers	Unprocessed plastic containers /drums / IBC'S	N/A - Freestanding	N/A	15	10	1	150	1	150	<1 week	It must be noted that the containers/drums are likely to be empty so the actual tonnage will be low and the self-combustion risk is extremely low
AREAS 4	Hazardous plastic container storage	Unprocessed plastic containers /drums / IBC'S	N/A - Freestanding	N/A	15	10	1	150	1	150	<1 week	As above - containers deemed hazardous by the site chemist
AREA 5	Containing washing area	As above	As above	N/A	5	3	1	15	1	15	<10 hours	Containers undergo full inspection and washed of any hazardous residues; area clear out-of-hours
AREA 6	Non-hazardous plastic containers	Unprocessed plastic containers/drums	3-sided concrete firewall bay	3.2	10	7.5	2	75	1	150	<1 week	See AREAS 1 - 4 comments
AREA 7	Non-hazardous plastic containers	Unprocessed plastic containers/drums	As above	3.2	10	7.5	2	75	1	150	<12 hours	As above and actual pile size would be much less as waste will constantly be moving
AREA 8	Non-hazardous plastic bales/bags	Mixture of mechanical sorting and processing	As above	3.2	10	7.5	2	75	1	150	<12 hours	N/A
AREA 9	Virgin timber / wood feed for biomass and pelleting plant (non-waste)	Mixture of mechanical sorting and processing	As above	3.2	10	7.5	2	75	1	150	<12 hours	N/A
CONVERSION FACTORS												
Conversion factors for waste piles are worked out using the following methods set out by Natural Resources Wales												
The maximum length & width of pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x relevant conversion factor												
Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/bale stacks												
Conversion of rectangle + pyramid for waste stored within a bay (approx. 0.75)												
Conversion of pyramid volume for waste stored in a free-standing stockpile (approx. 0.333)												
For areas containing skips, conversion is calculated by volume of each skip x number of skips												

NOTES

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	02.06.21	CP	Initial drawing
A	09.09.21	CP	Updated layout / client comments
B	11.10.21	CP	Updated layout / client comments
C	21.02.22	CP	Updated layout / NRW comments
D	26.09.22	CP	Updated layout / NRW comments
E	11.11.22	CP	Updated layout / NRW comments
F	15.11.22	CP	Updated layout / NRW comments

Key:

- Permit boundary
- Area covered by Part B Authorisation with LPA and not part of permitted operations
- Combustible waste storage areas
- Combustible waste storage areas (hazardous)
- Product storage non-waste
- Out-of-hours mobile plant storage
- Waste recycling buildings
- Concreted areas
- Other buildings (offices, etc.)
- Stone surface / free draining
- Landscaped/grass areas
- Location of fixed & mobile plant (indicative)
- Interlocking concrete fire walls (minimum 0.6m thick)
- 0.15m high concrete kerbing/seal
- Mains water point
- Spill kit
- Fire fighting equipment (extinguishers, etc.)
- Fire water containment / pollution control equipment i.e. booms, drain mats, drain plugs etc..
- Protective clothing location
- Access routes for emergency vehicles and site plant manouevring areas
- Fire alarm
- Surface water fall direction
- Foul (contaminated) water drainage
- Foul manholes
- Plant shut off
- Fire assembly point
- CCTV cameras (indicative)
- Infrared/heat detection cameras
- Emergency services box

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

DRAWING TITLE
SITE LAYOUT & FIRE PLAN

CLIENT
New Horizon Biofuel and Animal Bedding Co Ltd

PROJECT/SITE
Units 9 & 10, Vauxhall Industrial Estate, Ruabon, Wrexham LL14 6HA

SCALE @ A1	CLIENT NO	JOB NO
1:200	2704	012
DRAWING NUMBER	**REV**	**STATUS**
VIE/2704/03	F	Issued
DRAWN BY	**CHECKED**	**DATE**
CP	PT	15.11.22

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk

Appendix II

Complaints Report Form

COMPLAINTS PROCEDURE

1) Any complaints received in relation to noise and vibration will be recorded on the form below. This form will normally be completed, signed and dated by the site operator, if they are not available, the Office Manager will complete the form.

2) The name, address and telephone number of the caller will be requested.

3) Each complaint will be given a reference number.

4) The caller will be asked to give details of:
   - the nature of the complaint;
   - the time;
   - how long it lasted;
   - how often it occurs;
   - is this the first time the problem has been noticed; and,
   - what prompted them to complain.

5) The person completing the form will then, if possible, make a note of:
   - the weather conditions at the time of the problem (rain snow fog etc.)
   - strength and direction of the wind; and,
   - the activity on the site at the time the noise was detected, particularly anything unusual.

6) The reason for the complaint will be investigated and a note of the findings added to the report.

7) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.

8) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be referred to NRW

9) Following any complaint the complaints procedure will be reviewed to see if any changes are required or if new procedures need to be put in place.

Complaints Report Form	
Date Recorded	Reference Number
Name and address of caller	
Telephone number of caller	
Time and Date of call	
Nature of complaint (noise, vibration) (date, time, duration)	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other complaints relating to this report	
Any other relevant information	
Potential reasons for complaint	
The operations being carried out on site at the time of the complaint	
Follow Up	
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Noise & Vibration Management Plan	
Date changes implemented	
Form completed by	
Signed	
Date completed	