Car Parking Management Plan

Maelor Foods, Pickhill Lane

Maelor Foods Limited

Prepared by:

SLR Consulting Limited

SLR Project No.: 415.065141.00001

20 April 2026

Revision: 04

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	12 September 2025	EG	DRM	DRM
02	15 December 2025	EG	EG	EG
03	19 December 2025	EG	EG	EG
04	20 April 2026	EG	EG	EG

Basis of Report

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1.0 Introduction

Background

1.1 SLR Consulting Ltd (SLR) has been appointed by Maelor Foods Limited to prepare a Car Parking Management Plan (CPMP) in relation to their poultry processing facility located on Pickhill Lane near Wrexham.

1.2 The site has operated as a poultry processing facility for the last 10 years. In June 2025 the site received planning permission (*reference number: P/2022/0820*) to vary Condition 7 of Planning Permission *APP/H6955/A/18/3216187* (*P/2017/1032*) to permit the processing of 2,000,000 birds per week.

1.3 This CPMP has been prepared to discharge Condition 15 of approved planning permission *P/2022/0820*, with condition 15 extracted below for ease of reference:

> ***Condition 15:*** *No more than 1,000,000 birds shall be processed each week until a Car Park Management Plan has been implemented in accordance with a scheme that shall first have been submitted to and approved in writing by the Local Planning Authority. The Car Park Management Plan shall thereafter remain in operation for the lifetime of the development.*

1.4 This CPMP builds upon the existing car parking strategy for the site, which has been operating successfully for many years.

Objectives of this CPMP

1.5 This document has been prepared to inform the Local Planning Authority and Highways Officers at Wrexham County Borough Council (WCBC) of the proposed operation and management of the car park associated with the Maelor Foods site and how the car park will operate once planning permission *P/2022/0820* and the processing of more than 1,000,000 birds is in operation.

1.6 The key objective of this document is to ensure that the development proposals do not cause any disruption to the surrounding highway network and to ensure that parking associated with the site use is well management and that robust processes are in place to ensure that this is the case.

1.7 The overarching aims of this CPMP are as follows:

- To provide a safe and secure car park;
- To provide a car park that allows easy access for those that are permitted to use it; and
- To ensure that a system is in place to ensure parking is allocated to the appropriate users and unauthorised use and parking behaviour is prohibited.

2.0 Permitted Development, Access & Parking

Context

2.1 The following sections detail the development proposals in terms of access, parking provision and parking demand.

Permitted Development

2.2 The site has operated as a poultry processing facility for the last 10 years. In June 2025 the site received planning permission (*reference number: P/2022/0820*) to vary Condition 7 of Planning Permission *APP/H6955/A/18/3216187* (*P/2017/1032*) to permit the processing of 2,000,000 birds per week.

2.3 As part of the permitted development proposals, it is anticipated that 125 additional staff members are proposed to work at the site. This will bring total staff members to around 400.

Access Arrangements

2.4 Use would be made of the existing access points to the site off Pickhill Lane, which have recently been subject to improvement.

2.5 The main staff car parking area access and the main site access for HGVs are separate, as per existing arrangements, both accessed off Pickhill Lane, as presented in **Photo 1** below.

Photo 1: Maelor Foods Access Points and Signage



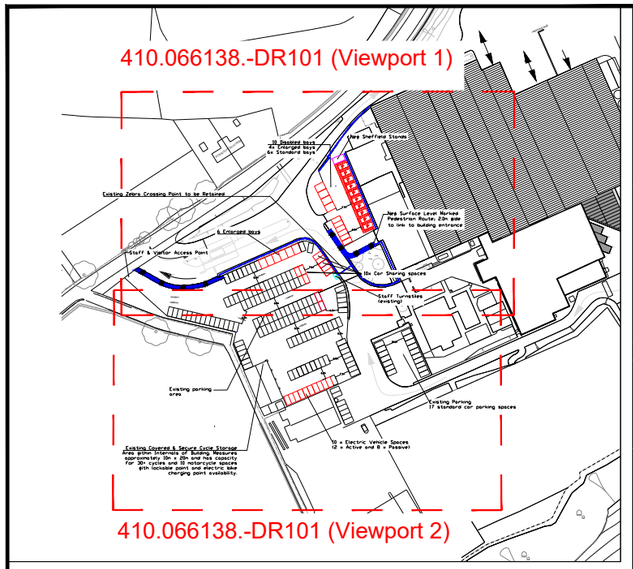
2.6 All visitors and staff will enter via the staff and visitor access point, which is clearly signed at the entrance gate (**Photo 1**) for approaching vehicles. This signage will be maintained at all times.

2.7 Taxi drop-off and pick-up will take place from within the staff / visitor car park, as per the above access arrangements.

2.8 In terms of HGV access, the site provides a circulatory system for large delivery vehicles and signage is provided within the site directing vehicles to the relevant areas.

Car Parking Provision

2.9 As part of the development proposals, the car park will be remarked to provide additional car sharing spaces etc. The approved car park layout is presented over the next two pages.



Frampton Gloucester

10 Disabled bays
4x Enlarged bays
6x Standard bays

New Sheffield Stands

Existing Zebra Crossing Point to be Retained

6 Enlarged bays

Staff & Visitor Access Point

7.7m

6.8m

New Surface Level Marked Pedestrian Route; 2.0m wide to link to building entrance

Flag
Flag
Flag

7.0m

10x Car Sharing spaces

6.0m

6.0m

6.0m

Staff Turnstiles (existing)

Sp

N

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INFORMATION ONLY

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Standard Space = 2.4m x 4.8m
Enlarged Space = 3.6m x 4.8m
Disabled Space = 2.4m x 4.8m (+ 1.2m hatched area)
Electric Vehicle Space = 2.6m x 4.8m
Motorcycle Space = 1.4m x 2.0m

Cycle Parking = New: Sheffield Stand Area (min 6 stands)
Existing: 30 in covered storage area within outbuilding internals
Total = 6 x short stay + 30+ x long stay (secure and covered)

Pedestrian Routes to Main Entrance / Pedestrian Hardstanding

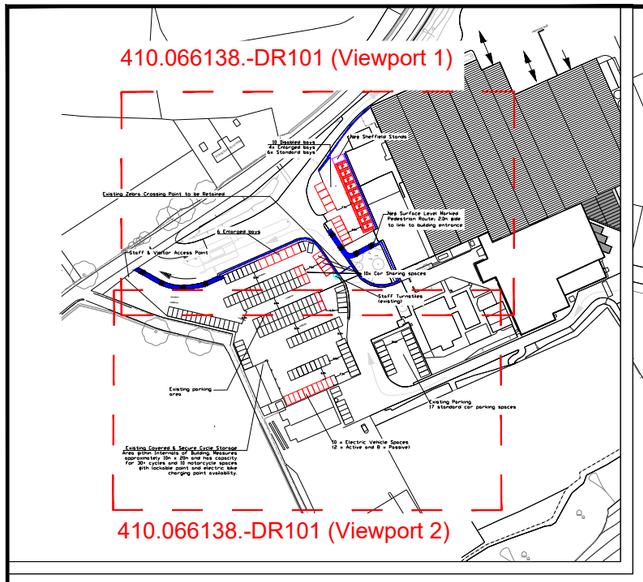
PICKHILL LANE, WREXHAM

MAELOR FOODS LTD

Proposed Car Park Layout (Drawing 1)

SLR

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Existing parking area

Existing Covered & Secure Cycle Storage Area within Internals of Building. Measures approximately 10m x 20m and has capacity for 30+ cycles and 10 motorcycle spaces with lockable point and electric bike charging point availability.

Staff Turnstiles (existing)

Existing Parking
17 standard car parking spaces

10 x Electric Vehicle Spaces
(2 x Active and 8 x Passive)

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Cycle Parking = New: Sheffield Stand Area (min 6 stands)
Existing: 30 in covered storage area within outbuilding internals
Total = 6 x short stay + 30+ x long stay (secure and covered)

Pedestrian Routes to Main Entrance / Pedestrian Hardstanding

PICKHILL LANE, WREXHAM

MAELOR FOODS LTD

Proposed Car Park Layout (Drawing 2)

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YF / EG	EG	20.04.26	Scale at A3 1:500	410.066138.-DR102	F

2.10 In summary, the site will be provided with 223 car parking spaces and 10 motorcycle spaces. It is confirmed that a minimum 6.0m aisle width for all spaces will be available. The on-site parking provision is as follows:

- 183 standard spaces;
- 10 x disabled spaces;
- 10 x enlarged spaces;
- 10 x car sharing spaces;
- 10 x electric vehicle spaces (2 x active and 8 x passive); and
- 10 x motorcycle spaces.

2.11 It is confirmed that all parking spaces will be marked out with white lining materials.

Cycle Parking Provision

2.12 The following cycle parking provision will be provided within the curtilage of the site:

- New provision: Sheffield Stand Area close to building entrance.
- Existing provision: 30+ x spaces in a covered storage area within the existing outbuilding.
- Total on-site provision: 6 x short stay spaces and 30+ long stay spaces.

Pedestrian Considerations

2.13 Under the proposals there will be a number of modest improvements for pedestrian access. These improvements include a new 2.0m surface level marked pedestrian route from Pickhill Lane, through the car park, to the building entrance.

3.0 Parking Management and Enforcement

Context

3.1 The overarching aim of this CPMP is to ensure that the development proposals suitably manage car parking. This will ensure that car parking is used effectively and does not result in any issues on the local highway network.

Staff / Customer Parking Arrangements and Allocation

3.2 The car park will continue to operate on a first-come, first-served basis, with no permit system in place.

3.3 Access points for staff and customer parking are clearly signposted at the entrance to ensure all users are directed to the correct parking areas. Road markings will also be provided around the car park to show the circulatory system in place.

3.4 Disabled parking bays are reserved for use by drivers or passengers displaying a valid disabled parking badge, confirming their authorisation to use these spaces. All disabled bays will be clearly marked on the ground.

3.5 Enlarged bays will be used by anyone on a first-come first serve basis. If converted to disabled bays in the future, these will be re-marked for such use.

3.6 Electric vehicle charging point (EVCP) bays are reserved exclusively for use by electric vehicles.

3.7 Designated car-sharing spaces will be available for registered participants in the car-sharing scheme, allocated on a first-come, first-served basis. Clear signage will be provided to ensure these spaces are easily identifiable and used only by authorised car-share users.

3.8 Taxis will drop-off and pick-up in the staff and customer car park.

3.9 No staff or visitors at the site will be permitted to park on the adjoining highway.

3.10 All staff will be made aware of the above arrangement on their site induction. All customers will be provided with information on the parking arrangements prior to arriving on site.

Cycle Parking

3.11 Cycle parking will be provided on a first come first serve basis. There would be no allocated spaces. Access to the bike stores will be secure, with the cycle store requiring the use of a fob or keycode to prevent unauthorised access.

3.12 Demand and the use of cycle parking will be monitored closely through the Travel Plan and as part of the car parking monitoring process.

Monitoring and Enforcement

3.13 The monitoring of the car park will be the responsibility of on-site management at Maelor Foods.

3.14 As part of the car parking management process, spot checks will be undertaken to review the parking demand versus provision and to make sure staff and customers are not abusing the parking rules. These spot checks will ensure the following:

- No vehicle is parked outside of marked parking bays;
- Disabled spaces are only occupied by those that have displayed a valid disabled badge;
- Car sharing spaces are only occupied by those registered as actively participating in car sharing;
- Electric vehicle charging point bays are used only by vehicles compatible for electric charging;
- Access routes etc. remain unobstructed at all times and there are no safety hazards, obstructs to visibility etc;
- No staff or visitors at the site will park on the adjoining highway; and
- The cycle stores are kept secure and well-maintained for use.

3.15 If there are regular abusers of parking spaces, warnings will be given.

3.16 A reporting system with on-site management will be in place to allow any parking issues to be brought to the attention of Maelor Foods, which will be dealt with in a timely fashion. Issues could include people parking inappropriately or concerns with parking infrastructure.

3.17 The contact details associated with this management system will be provide to all staff upon their site induction.

Delivery and Servicing

3.18 Delivery and servicing for the site will remain as per existing arrangements. The site is subject to a live delivery and servicing management plan which will continue for the duration of site operations. This is attached as **Appendix A**, to the rear of this CPMP report.

3.19 It is confirmed that the Service Management Plan will be implemented day-to-day and reviewed on a regular basis. Maelor Foods are committed to minimising potential adverse impacts associated with the operation of the site and have mechanisms already in place to allow for issue to be identified, reported and mitigated in a swift and efficient manner.

4.0 Security, Cleaning and Maintenance

Security

4.1 The entire car park is enclosed by secure perimeter fencing to deter unauthorised access. Entry and exit points are controlled by lockable gates, which are closed and secured whenever the facility is not in use. The area will be monitored through a combination of CCTV coverage and regular on-site patrols to prevent misuse etc.

4.2 Lighting will be maintained to an appropriate standard, ensuring visibility and enhancing personal safety in the car park during evening and early morning hours.

4.3 Any security concerns identified during inspections or reported by users will be addressed promptly.

Cleaning and Maintenance

4.4 The car park will be subject to a regular cleaning schedule to ensure it remains clean and safe. Routine sweeping and jet washing will be undertaken as required to remove dirt, debris that may present safety hazards.

4.5 In colder months, gritting and snow clearance will be carried out when necessary. Drainage systems will also be checked regularly to prevent water pooling or flooding within the car park.

4.6 Painted markings, signage, and bay allocations will be inspected periodically and undated and replaced when required.

5.0 Monitoring and Review of Strategy

Monitoring & Review

5.1 This CPMP will continue as a live document following the development proposals implementation and will remain under continual monitoring. This will take into account any issues that may have occurred once operational.

5.2 Feedback forms from users will be welcomed by staff and customers, as this will provide scope for possible adaptions to the strategy and management plan.

5.3 In the unlikely event that there are any complaints received, these will be investigated, and should it be agreed that the complaint(s) are based upon reasonable deficiencies in the management strategy, then appropriate and immediate mitigation action will be taken and the plan updated.

5.4 A formal review of the car parking strategy contained within this document will be undertaken annually.

Appendix A Delivery & Servicing Management Plan

Car Parking Management Plan

Maelor Foods, Pickhill Lane

Maelor Foods Limited

SLR Project No.: 415.065141.00001

20 April 2026

Maelor Foods Ltd

Pickhill Lane, Cross Lanes. LL13 0UE

Service Management Plan (Updated July 2024, Reviewed September 2025)

Specification

This Service Management Plan outlines the ways in which Maelor Foods will coordinate and manage all deliveries to and from the site, including those which occur out of hours. It applies to vehicles and drivers which are the direct responsibility of Maelor Foods, but also their primary suppliers and service partners.

By actively influencing and monitoring all delivery vehicle movements, it will be possible to reduce round trip journey times, maximise fleet utilisation, reduce fuel consumption, increase road safety and improve the quality of life for residents and the local community.

It is important that the plan provides an outline structure whilst retaining flexibility to respond positively to changes in market demand or other circumstances outside of the control of Maelor Foods.

Aims and Objectives

The main aim of the Service Management Plan is to manage the movement of delivery vehicles to and from the site in order to maximise operational efficiency and be a good neighbour to residents and the local community.

Key objectives include:

- Minimise the noise associated with all delivery vehicle movements;
- Manage out of hours delivery movements so as to minimise potential impacts on residents and the local community;
- Appoint a key member of staff to be responsible for the management of the plan, monitoring and ongoing assessment;
- Maintain communications with WCBC, local residents on Pickhill Lane and other interests;
- Prepare a 'Driver Charter' built around the principles of a quiet delivery scheme; and
- Monitor site operations and establish a feedback structure for dealing with complaints (if any).

This plan is a working document and has updated (July 2024) to consider the processing of 2 million birds per week (APP/H6955/A/18/3216187). A number of additions have been added to this plan since its last review, to improve and better mitigate any impacts from delivery and servicing at the site and improve business operations.

Site Operation

Maelor Foods currently operates daily with the majority of movements coordinated between the site and their parent company Salisbury Poultry in Bilston, Wolverhampton. Key routes between Maelor Foods and Salisbury Poultry are to and from the south along the A41 and M54, as shown in **Figure 1**.

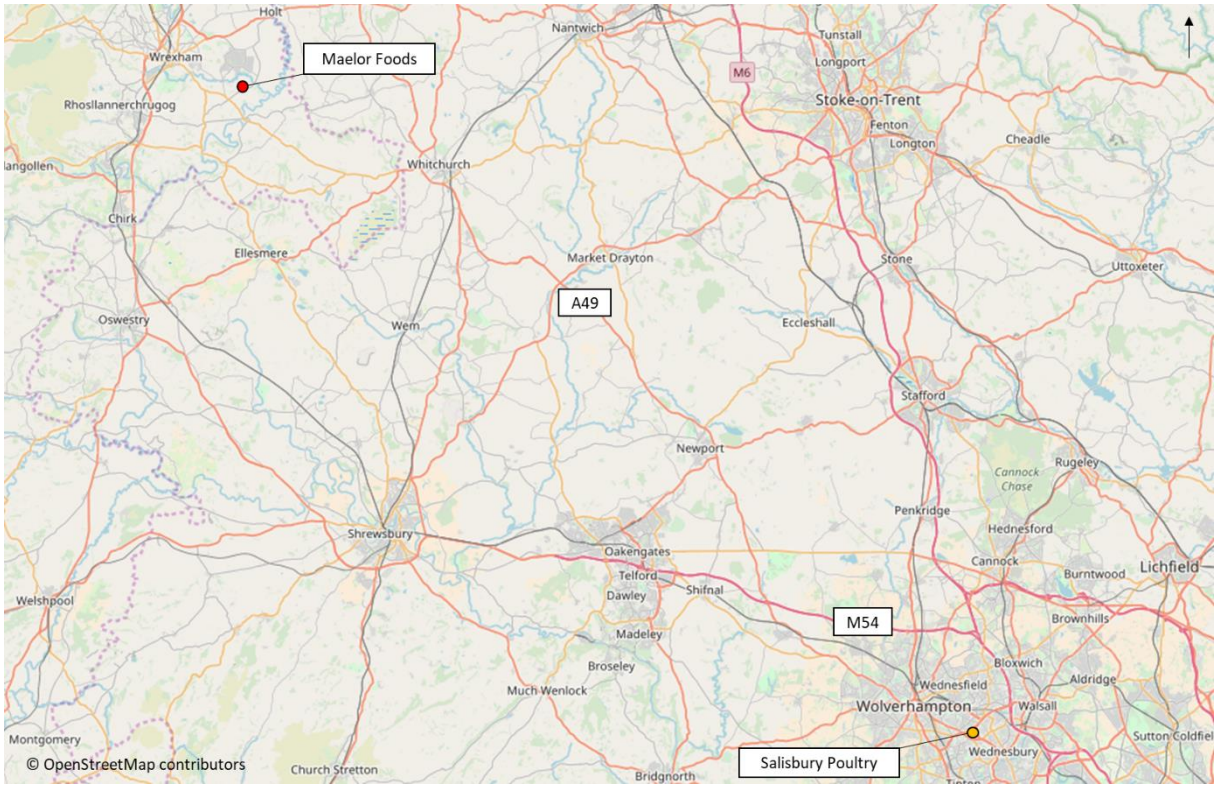


Figure 1: Maelor Foods and Salisbury Poultry Site Locations

There are also a number of other daily movements associated with deliveries from local farms, as well as other supplies required for day to day operations.

Vehicle movements are coordinated from the main site access on Pickhill Lane which is wide and avoids the need for vehicles to wait before entering the site. All vehicles are recorded at the security desk and then proceed to the main loading/unloading area to the east of the main building, away from Pickhill Lane. To further assist, a secondary weighbridge is provided within the site to avoid vehicles having to wait at the site access for longer than is necessary.

Vehicle movements currently occur throughout the day, with the majority coordinated during the inter-peak period (i.e. 0900-1500hrs) when traffic flows are generally lower on the network. There are some vehicle movements that occur out of hours (i.e. 2000-0600hrs).

Site Access Arrangements

The delivery/service access point is separate from the staff/visitor access points, although located adjacent to each other. These access points are clearly signed, as shown in the photos overleaf.

Photo 1 & 2 – Delivery Access Point & Signage





Service Management Plan Coordinator

The key contact responsible for the implementation of the plan is the Transport Manager who should be the first point of contact for all delivery-related enquiries.

Initiatives

A number of initiatives are implemented at the Maelor Foods site to ensure that it can continue to operate efficiently and considerately. This includes:

- Coordination of deliveries with Salisbury Poultry and other key suppliers through the use of a vehicle booking system with managed arrivals and departures;
- New drivers at Maelor Foods to be sent on an 'eco-driving' course to positively influence driver behaviour;
- New staff at Maelor Foods involved in loading/unloading activity to be briefed and trained with techniques to minimise noise, in accordance with the code of practice;
- Arrange for noise monitoring equipment to be installed on site annually to record baseline noise;
- Consideration to be given to using newer and quieter delivery vehicles and equipment (where possible);
- Ensure all equipment, both on vehicle and at the delivery point, is in a good working order and maintained/modernised to minimise noise when in operation;
- Liaise with WCBC and residents to explain the plans to manage delivery vehicle movements throughout the day and out of hours;
- Liaise with clients, suppliers and other local businesses to minimise the likelihood of unscheduled vehicles arriving at the site; and
- Consideration to be given to the storage of vehicles off-site to minimise out of hours movements (if required).

Noise Mitigation

The site operates under a new noise management plan, attached as **Appendix A** to this document, which will be strictly followed as part of this service management plan.

An ultrasound barrier/acoustic fence with a barrier rating of A5: B3 is to be installed around the site, with this fence designed to mitigate the noise impact on any residential receptors.

Working Group

Consideration will be given to establishing a more formal working group comprising management from Maelor Foods, WCBC, residents on Pickhill Lane and Sesswick Community Council. The working group will be engaged so that changes to activity at the site can be communicated to key stakeholders whilst also providing a feedback mechanism to record views, opinions and complaints (if any). Annual updates will be provided.

Engagement has already been made with these parties; however further engagement will continue and provide an updates to key stakeholders.

Monitoring

The Service Management Plan will be monitored regularly to ensure drivers and staff are performing their duties in line with the Driver Charter. Updates will be provided as part of regular working group sessions (as discussed above).

More formal monitoring (i.e. noise emissions) can be coordinated annually by management at Maelor Foods, with an up to date delivery schedule maintained each week for vehicle movements into and out of the site. This will assist in making sure all drivers to and from the site operate in accordance with the code of practice.

Management Support

The management at Maelor Foods are fully supportive of the Service Management Plan for their own staff and vehicles, as well as partners and suppliers staff and vehicles.

Maelor foods are committed to minimising potential adverse impacts associated with the operation of the site and have mechanisms already in place to allow for issues to be identified, reported and mitigated swifty and efficiently.

Appendix A – Noise Management Plan

PHASE 2 NOISE MANAGEMENT PLAN

Version Control

Version	Date	Changes	Issued By	Approval
1	01 Sept 2022	1st issue of operational NMP	S. Hutchinson	J.Colley
2	17 Feb 2023	Minor change to update based on Feb NIA report including WWTP blowers for MBR plant and revised recommendations for HGV noise & chiller plant.	S. Hutchinson	J.Colley
3	27 Oct 2023	Revised after noise impact assessment in Sept – Oct 2023.	J Rogers	J.Colley
DRAFT	26 Jan 2024	Revised after Noise Impact Assessment resubmission to NRW	J Colley	R Mehta

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1 Introduction

Maelor Foods Ltd are updating our Noise Management Plan (NMP) for Phase 2 operations at our poultry processing facility at Pickhill Lane, Wrexham, LL13 0UE.

Our environmental permit for the site (EPR/AB3591ZQ) is regulated by Natural Resources Wales (NRW) under The Environmental Permitting (England & Wales) Amendment Regulations 2018.

A NMP was prepared to support our environmental permit application and condition 3.4.1 allows us to use an approved NMP to control noise from the permitted installation.

> *"Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration."*

Noise Management Plans (NMP) are required for installations permitted under the Environmental Permitting (England and Wales) Regulations 2018 (as amended) (EPR) if the activities undertaken at the installation have significant potential to cause noise nuisance.

We have determined that the activities at our installation have an inherent noise nuisance potential and some operations could be noisy.

This NMP is designed to ensure that all reasonable measures are taken to control noise emissions, and if an adverse impact is caused then prompt action will be taken to identify the source and apply corrective measures. It provides a schedule of actions that will be taken to help minimise noise impact and sets out site management procedures for the management of noise.

2 Objectives & content

The objectives of this NMP are to identify all significant sources of noise present at the facility and then provide information on management practices and the infrastructure in place to abate or minimise noise emissions from the facility to low impact.

The effects of emergency and abnormal circumstances on noise emissions are also considered. Monitoring procedures are described to help validate the effectiveness of measures taken to control noise emissions. The plan also outlines measures taken in the event of the detection of excessive noise during monitoring, with a view to reducing this to an acceptable level as soon as possible.

Response procedures are described in case noise related complaints are received from a neighbour of the plant, with procedures for recording all relevant information and investigating the potential cause of the noise.

3 Guidance & review

This NMP has been produced with reference to Noise and vibration management: environmental permits, Updated 31 January 2022.

Our NMP is to be reviewed on a regular basis (at least annually) or more frequently if there are any changes to the activities and/or if any specific issues in respect of noise have become apparent.

Any amendments stemming from these reviews may need to be agreed with and approved by NRW and / or the Planning Authority to meet the terms of our Planning Consents.

NRW and the Planning Authority should be consulted at an early stage to ensure that the NMP can be amended in future, with the prior written agreement of the authorities, to ensure that any necessary and beneficial changes to noise management practices can be implemented without breaching the terms of our Planning Consents and to allow compliance with the EPR permit.

Such changes may need to be made in the light of operating experience, complaint episodes or if new developments or technologies become available in future so that facilities or practices can be adapted and optimised to further reduce noise impacts.

For the management of deliveries and noise, reference should be made to Department for Transport's Guidance on Reducing noise to make deliveries outside normal delivery hours

3.1 Updates

An initial noise management plan for the installation was developed by Environoise as part of the initial noise impact assessment for the installation when permitted in 2017 and it was adapted into the EMS.

Version 1
Maelor Foods prepared a Noise Management Plan for the environmental permit variation application for Phase 2 in September 2022. The current Operational Noise Management Plan has been based on this and amended accordingly with the later versions of this NMP.

Version 2
The variation application was withdrawn and resubmitted in February 2023 to revise the wastewater treatment plant design and a revised noise impact assessment was included.

Version 3
The NMP was reviewed in October 2023 following a noise survey and impact assessment undertaken by Acoustics Environment. This was to address NRW's requirements in a Schedule 5 Notice associated with their determination of the variation application for Phase 2 of the site.

Version 4
The NMP was further reviewed in January 2024 following a noise survey and impact assessment undertaken by Acoustics Environment with support from Jacobs Bond Pascoe. This was to address NRW's requirements in a second Schedule 5 Notice associated with their determination of the variation application for Phase 2 of the site.

3.2 Improvements / Actions

During the site surveys / visits for the noise impact assessment in September / October / December 2023 a series of observations were made which could further reduce noise levels from some parts of the installation. These are summarised in the Table below along with details of actions taken and proposed:

Recommendations for Reducing Noise Levels to ensure Low Impact

Aspect	Improvement Action	Status / Timescale
People practices – driving onto site with radios at high volume, beeping horns, high speed on approach road	Re-enforce training & disciplinary policy for employees entering and exiting site without regard for neighbours	Complete & ongoing
Speed bumps causing impact noises / braking noise from vehicles at site entrance	Assess safety aspects & remove bumps / add safety signage / alternative measures	Removed bump at main site entrance. Removed bump at staff car park entrance
Onsite transport noise – some audible FLT, HGV reversing alarms	Reassess site and contractor vehicles & replace reversing alarms with 'white noise' reversing alarms	Complete and ongoing
Weighbridges – minimise gatehouse weighbridge use to reduce vehicle movement noise at site entrance	Investigate using the main weighbridge for all HGV vehicles and restrict gatehouse weighbridge for back up.	6 months to implement any changes
Acoustic Barriers or containment	Progress the noise mitigation measures proposed in the revised Acoustics Noise Impact Assessment to design and install various acoustic screening • A noise barrier will be installed to limit site noise at Receptor A. • A noise barrier will be installed to limit the noise at Receptor B and C • Ultrasound reduction housing will be installed for the scrubber	12 months for all barriers and containment proposed
Onsite transport / vehicle loading – noise from refrigerated trailers	• Add more electrical hookups for loading produce & overnight storage • Review the addition of Sound reducing technology on the fridge units - Auto switching from Electric to diesel	Extra electrical hookups installed in Dec 2023 12 months for all investigations/review of available technology

	- Low noise condensors - Mobile acoustic hoods - Multi Temperature T-1200R Whisper Pro Models - Acoustic jackets around compressors - PIEK Certification approval - Use of PZ units	
Door control – plant rooms, roof space, lairage – internal noise breakout	Re-enforce training & enforce disciplinary policy for employees breaching door control practices	Complete & ongoing
WWTP aeration blowers	Reassess existing and new blowers at WWTP with a view to upgrading & enhancing the noise mitigation around them to achieve low impact - Bespoke acoustically attenuated enclosures to be designed	12 months to implement any changes
Main chiller plant	Reassess existing chiller plant and ancillary plant area with a view to upgrading & enhancing the noise mitigation to achieve low impact, to include: - Acoustic cladding/shielding of chiller plant - Acoustic silencing to existing fans	12 months to implement any changes
Inlet and Outlet vents from the Factory – around the roof and high level areas	Install splitter type attenuators to all HVAC inlets and outlets Install splitter type attenuators to all forced air inlet sand outlets	12 months to implement any changes

4 Site Location and Plant Description

4.1 Site Location

The poultry processing facility is located on the site of the former Maelor Creamery, Pickhill Lane, approximately 1 km to the north-north-west of the village of Bangor-on-Dee and approximately 700m to the south-east of the residential area of Cross Lanes. Appendix 1 shows the locations of potentially sensitive noise receptors around the plant.

The proximity of these sensitive receptors is such that there are risks of off-site noise nuisance being caused and therefore high standards of noise management are required.

~~5.2~~4.2 Plant Description & Risk Assessment

The plant undertakes the slaughter and processing of up to 2 million broiler chickens per week under Phase 2 operations. The following paragraphs describe the key activities in each area of the plant, the noise risks in each area and the key control measures which will be used to reduce noise emissions and/or disrupt the pathways for noise to potential receptors. The noise risk of each area has been assessed against experience gained to date and from knowledge of other UK poultry processing plants.

Appendix 2 shows the locations of noise sources around the site under Phase 1 and lists the Phase 2 noise sources. The location plan will be updated with the Phase 2 noise sources listed when final layout is confirmed.

~~5.2.1~~4.2.1 Delivery & Lairage / Intake

Live chickens from broiler production farms arrive at the plant in modules on HGV trailers. The HGV trailers enter a lairage area, before moving to the intake area where the modules are unloaded. All doors remain closed when not in use. Birds are transferred from the intake area to the preliminary processing area.

The Lairage / Intake area has a low level of noise from the birds and a recirculated air conditioning system maintains good working conditions and a comfortable environment for the birds held in this area prior to slaughter.

The lairage is cleaned daily with the manure manually scraped into collection bins and floors washed using trigger operated spray lances.

The live bird holding area is large enough to accommodate the temporary holding of live bird delivery vehicles pending unloading if there are processing delays and deliveries of live birds are pushed back until the plant is operational again. As a further contingency, under permit Variation 2 Maelor Foods acquired the former transport depot adjacent to the installation and have scope to convert this into an additional live bird holding area for emergency use. This could allow up to seven live bird vehicles to be parked inside so the live birds can be cooled by air fans in a non-stressful manner. The live bird vehicles would be moved from here into the lairage as soon as the lairage was available to receive them.

Until this is implemented the noise potential is unsubstantiated but it is expected to be a low noise source and no worse than the lairage.

HGV delivery Best Practice and Site Management recommendations are incorporated into this Noise Management Plan.

A combination of traffic management and maintenance of road surfaces will minimise traffic noise. Broadband type reversing vehicles warning alarms are used on the majority of vehicles used on or visiting the site or they are deactivated otherwise. The traffic flow design is such that vehicles do not have to reverse into or out of the lairage. These factors minimise noise from reversing alarms on HGV vehicles.

This is a Medium noise risk area of the plant.

~~5.2.2~~4.2.2 Stunning and bleeding

Birds are transferred from the intake area via a Linco module handling system to the preliminary processing area. Here the modules are loaded onto the intake line and the birds are gas stunned, then removed from the modules and hung-on to the “shackles” of an overhead conveyor line and transferred to a bleeding area. Here the birds are decapitated and blood is drained into the blood trough and pumped away at frequent intervals during the day to the blood storage tank in the ABP storage building.

The empty modules are transferred to the “module wash” and then transferred to the “box return” service area where they are loaded onto empty HGV trailers for subsequent re-use in the collection of birds from farms.

The internal workplace is air conditioned on a recirculated air system while the module wash area is extracted and dispersed through the roof exhaust point.

The area is washed down and sanitised during night shifts and at weekends. The live bird handling systems area is cleaned every night and briefly in between kills.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.3~~4.2.3 AeroScalder

After bleeding the birds are conveyed into the de-feather room where they are scalded by a saturated hot air system. The birds are conveyed through the scalding unit to loosen their feathers to facilitate mechanical plucking in the de-feather area.

The AeroScalder system is entirely enclosed and consists of two chambers; an air conditioning chamber where the moisturised hot air is prepared and, next to it, the scalding chamber itself through which birds are conveyed and into which the scalding air is blown. Moisturised hot air is blown forcefully onto the most critical parts of the broiler, preventing over scalding of fragile parts.

As a precautionary measure we extract air from this area of the plant at high rates directly to our chemical scrubber odour abatement system before dispersion to atmosphere through a tall stack.

There are also fresh air inlets to provide “cooling” air, which is also extracted to the chemical scrubbing abatement system.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.4~~4.2.4 De-feathering

After scalding the birds are conveyed to the de-feather area where mechanical defeathering is undertaken in defeathering machines.

Feathers are rinsed from the machines with re-circulated water fed via nozzles and transported via a recirculating water flume into the ABP storage building. The flume water is drained down to the effluent treatment plant at the end of each day. The feathers are pressed to remove excess water before collection in a vehicle trailer in an ABP collection bay.

Wall and ceiling mounted fans introduce cooling air into the building. The headspace air in the de-feather area is potentially odorous so is extracted directly to a chemical scrubber odour abatement system.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.5~~4.2.5 Evisceration

The birds are mechanically eviscerated to remove the intestines and other internal organs (heart, lungs, gizzards, livers etc.). Edible offal is separated, dry chilled and packed for retail markets and transferred to the cold store awaiting distribution.

Inedible offal is transferred by vacuum lines to the animal by-products trailer in the ABP collection bay where it is collected daily for off-site processing.

Carcasses are rinsed during evisceration. Spills of meat scraps onto floors are quickly dealt with and collected into bins for transfer to ABP trailer.

An enclosed air system is in place with cooling to moderate the working environment and a small amount of input air is provided to maintain fresh air.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.6~~4.2.6 Treating & processing

Under Phase 2 we will be applying flavouring rubs to some whole bird products but will not undertake cooking of whole birds. Ingredients will be mixed onsite and flavours such as, but not limited to sage and onion, garlic and herb will be injected into the whole birds. Up to 30,000 birds per week will be flavoured (approx. 50T per week) which will utilise around 6-8T of marinade per week.

At the moment there is no portioning or cutting operations undertaken.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.7~~4.2.7 Chilling & packing

Following evisceration, the birds are transferred to the chiller where they pass through on a shackle carousel system, spending sufficient dwell time in the enclosure to ensure they leave at the correct temperature (<4°c). Air in the chiller enclosure is continuously recirculated via the refrigeration system to maintain the correct temperature in the enclosure.

Offal material which is fit for human consumption is transferred to chillers and cold storage areas, where it is stored before transport off-site. The cold storage buildings are kept refrigerated to prevent decay and are largely “sealed” by means of a cold-store type door.

The chiller plant room equipment / compressors are all located inside so there is no noisy external equipment. The building is constructed of insulated cladding panels which helps maintain desired temperatures within the inside in an energy efficient way and provides sound insulation. Vents are installed to discharge potential leaks of ammonia externally and these present a potential escape route for noise. The air cooled condenser and some ancillary plant are located within an enclosure adjacent to the chiller plant room.

The chiller and associated plant were assessed in our noise impact survey in July 2020 and the remaining non-louvred ammonia vent was found to be a potential source of offsite noise nuisance. Following this study this vent has been fitted with the recommended louvre. This was the only remaining ammonia vent which was not louvred; already louvred extracts were not audible at the noise measurement position.

The initial noise impact assessment for Phase 2 found that night-time noise levels at Site A receptor may be inadvertently affected by the chiller plant noise. To address this, the second, new chiller plant condenser for Phase 2 is being sourced and will be water cooled to ensure it can achieve the low noise specification recommended, so as not to increase the noise level at this receptor. This also has the benefit of providing recovered heat for hot water heating.

The latest noise impact assessment highlighted that the noise levels from within the chiller enclosure can be further mitigated and this is added to the improvements section of the NMP. This will include addition of cladding panels to the same height as the office block which will be specified to achieve noise attenuation.

This is a MEDIUM noise risk area of the plant.

~~5.2.8~~4.2.8 Animal By-Products Storage and Handling

The animal by-products (ABP) comprise of inedible offal, feathers, blood, inedible material, meat scraps, dead on arrival birds and WWTP screenings. These are all held in the ABP storage building which accommodates sufficient trailers to ensure ABP are always stored inside and collected in a timely manner.

Empty Animal By Product (ABP) trailers arrive on site and are weighed before being parked in the ABP storage building which accommodates sufficient trailers to ensure ABP are always stored inside and collected in a timely manner. Inedible offal and other ABP are transferred by vacuum lines into the ABP trailers. Feathers are transferred in a water flume, separated and pressed before being loaded into bulk trailers inside the building awaiting collection for further processing off-site. The ABP and feather trailers are collected daily and are replaced by empty trailers. Dolavs and other small containers used for collecting ABP around the process are emptied into the ABP trailer and then washed out. All factory doors remain closed when not in use and diesel engines are turned off whenever the vehicle is stationary. The number of ABP collections varies with the production rate and the operating hours on different days of the working week.

The blood tank is emptied daily and is regularly cleaned using an integrated Clean In Place (CIP) system. Blood tanker drivers connect to the external blood offloading point and link the outlet/exhaust of their tanker vacuum pumps to a flexible hose which is directly connected to the chemical scrubber abatement system extraction ducting. This operation takes around 20 minutes once per day.

The ABP building is fully enclosed and doors are kept closed except for immediate vehicle access and egress and closed at all other times. The building headspace air undergoes at least 3 air changes per hour to the chemical scrubber(s) for odour abatement to prevents fugitive escape of internal air.

Noise breakout from the internal vacuum system is a potential source of noise and was assessed in our noise impact survey in July 2020 and found not to be a likely source of offsite noise nuisance. The vacuum systems are operational between 05.00 - 22.00hrs.

This is a MEDIUM noise risk area of the plant.

~~5.2.9~~4.2.9 Module Washing

Empty live bird modules are washed in the “module wash”. The building air from this area of the plant is extracted for high level dispersion above the lairage building.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.10~~4.2.10 Trailer Washing

Unloaded HGV trailers are moved from the intake area to the “trailer washing” area where they are completely washed down before moving to the “box return” area for reloading with clean empty modules. The building air from this area of the plant is extracted for high level dispersion above the lairage building.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.11~~4.2.11 Module Return Area

Washed and sanitised modules are returned to the “box return” area where they are loaded onto clean HGV trailers. The building air from this area of the plant is extracted for high level dispersion above the lairage building.

All operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.12~~4.2.12 Waste-Water Treatment Plant (WWTP)

Waste-water (effluent) comprises of contaminated wash water from the abattoir and specifically from the de-feather areas and the feather flume system.
The WWTP is located downhill beyond the factory buildings, well away from the Pickhill Lane residencies.

Raw effluent drains to an enclosed/housed raw effluent pump sump. From the sump the raw effluent is pumped through an enclosed rotary drum screen on top of the balance tank to screen out larger solids from the effluent before treatment. The primary screenings fall into a skip which is enclosed on three sides with strip curtains on the fourth to minimise odours. The screenings are transferred into a trailer in the ABPs storage building. The screen and associated elements are cleaned daily.

The balance (and diversion tank on the occasions when it is used) are agitated by venturi mixers to mix and aerate the contents and to maintain aerobic conditions and prevent them from going septic and becoming odorous. The Phase 2 balance and diversion tank are enclosed tanks and the other balance tank is fitted with a cover, which helps contains noise from the venturi mixers. An air extraction unit pulls tank headspace air into the scrubber serving the WWTP area to reduce odour emissions.

From the balance tank, effluent is transferred to a Dissolved Air Flotation (DAF) system to flocculate and separate/remove suspended solids, fats, oils and greases, from where the separated solids are pumped to a covered sludge storage tank. The DAF plant is housed inside a new building and a new sludge dewatering plant will also be inside its own building so noise from these areas will be contained inside.

The separated liquid from the DAF plant is transferred to an activated sludge system tank for aerobic (activated sludge) treatment before final treatment in the membrane bioreactor and discharge to river.

Our activated sludge plant consists of anoxic treatment followed by an aeration tank where the conditioned mixed liquor is injected with air via fine bubble air diffusion manifolds. The membrane bioreactor plant removes the remaining suspended solids from the effluent to guarantee the final effluent quality.

The primary noise sources at the WWTP area are pumps and blowers. The aeration tank is served by two noise enclosures, one housing 2 x Aerzen D52S blowers and the other housing a Landia DK-6940 blower. These were assessed in our noise impact survey in July 2020 and found not to be a likely source of offsite noise nuisance. However, with new blowers to be installed for the MBR plant the noise enclosures around the existing blowers will be reviewed and updated accordingly.

The new MBR plant will also have 2 x Aerzen D52S blowers and will be provided with noise enclosure(s). In total there are 3 duty blowers and 2 standby.

This is a MEDIUM noise risk area of the plant.

~~5.2.13~~4.2.13 WWTP Sludge treatment, storage and handling

Under Phase 2 the combined DAF and waste or surplus activated sludge is dewatered before transfer off-site by contractors for land deployment or other waste recovery method. The dewatering plant is located inside a building at the WWTP and HGV's enter the building to collect sludge cake.

As a contingency, the Phase 1 sludge storage tank is retained for back up use and is covered. A mixer is in place to keep the sludge mixed if operational. The off gas from the tank headspace is vented into the WWTP area scrubber. Displaced air from the road tanker during sludge transfers is fed into the chemical scrubber. Sludge tanker drivers collecting non dewatered sludge connect to the external sludge offloading point and connect the outlet/exhaust of their tank or tanker vacuum pumps to a flexible hose which is directly connected to the for treatment before release to atmosphere. This operation takes around 20 minutes twice per day with the vehicle's engine left idling to operate the extraction pump. Under Phase 2 the sludge de-watering will reduce sludge collections by 60%.

This is a LOW noise risk area of the plant.

~~5.2.14~~4.2.14 Chemical Scrubber Odour Control & Mitigation Systems

The Phase 1 chemical scrubbers were assessed in our noise impact survey in July 2020 and found not to be a likely source of offsite noise nuisance but as a contingency the process area scrubbers are only operational at design duty between 05:00 – 21:00hrs, with a timer set to reduce fan speed between 21:00 – 06:00hrs. For the Phase 2 noise impact assessment the additional scrubbers were found to not have a significant offsite noise potential. The WWTP area scrubber is required to operate continuously.

This is a Medium noise risk area of the plant.

~~5.2.15~~4.2.15 Air Handling Systems in Process Areas

The process buildings are served by a recirculated air conditioning system and there are no emissions externally. All these operations are conducted inside with doors closed so noise escape will be minimal.

This is a LOW noise risk area of the plant.

~~5.2.16~~4.2.16 Utilities

Hot water for the activities is provided by 3 modular boilers comprising 9 modules in total. Two further boilers serve the aeroscalders.

All the boilers are located in the utilities building which is fully enclosed and ventilation points are fitted with louvres. The boilers operate during processing and cleaning and ramp down overnight to meet the base load only.

Water softening plant serving the boilers runs continuously and is located outside the utilities building and was not identified as a significant noise source during the 2020 noise impact survey.

Air Separation Unit (ASU) for nitrogen gas generation for use in our packaging applications. This minimises liquid or bottled nitrogen delivery and noise associated with deliveries.

This is a LOW noise risk area of the plant.

~~5.2.17~~4.2.17 Vehicle Loading and Unloading Operations

Pre-loaded HGV trailers with clean modules are weighed on an external weighbridge on the yard at the start of each shift (driver shifts are staggered throughout the day; start times vary and can start at any time depending on the Transport Plan). The vehicle then departs to a broiler production farm where the modules are loaded with live broiler chickens.

On return to site, the vehicle is re-fuelled at the on-site fuelling station before being re-weighed on the weighbridge. The tractor unit is de-coupled on the yard and the HGV trailer is then taken by a shunter vehicle in to the internal lairage area, before moving to the internal intake area where modules are unloaded by forklift truck which transfers live broiler chickens from the preliminary processing area. The empty vehicle is sanitised on the yard before being re-loaded with empty modules and drawers and the process is repeated. This process takes approximately 1.5 hours from when a vehicle enters the site to when it departs. All factory doors remain closed when not in use and tractor unit diesel engines are turned off whenever a vehicle is stationary.

Empty refrigerated trailers arrive on site and the vehicle is re-fuelled and AD-Blue topped up before being re-weighed. The refrigerated trailer is then positioned on the yard where empty Dolavs are taken off by a Forklift Truck via a ramp that is secured to the trailer by chains. Once the trailer is empty it is taken to a loading bay and connected to an electrical hookup point which provides the refrigeration system with an electrical power supply for approximately 1 hour while the vehicle is loaded by a ride-on pedestrian truck. The diesel 'donkey' engine is only turned on to fuel the trailers refrigeration system when the trailer is fully loaded and ready to leave the loading bay and exit site. Any refrigerated trailer that has been loaded, but needs to stay on site overnight, will be connected to one of the electrical hookup points located on

the yard to minimise noise. The number of produce dispatched in refrigerated trailers varies with the production rate and the operating hours on different days of the working week.

Empty Animal By Product (ABP) trailers arrive on site and are weighed before being parked in the ABP storage building which accommodates sufficient trailers to ensure ABP are always stored inside and collected in a timely manner. Inedible offal and other ABP are transferred by vacuum lines into the ABP trailers. Feathers are transferred in a water flume, separated and pressed before being loaded into bulk trailers inside the building awaiting collection for further processing off-site. The ABP and feather trailers are collected daily and are replaced by empty trailers. Dolavs and other small containers used for collecting ABP around the process are emptied into the ABP trailer and then washed out. All factory doors remain closed when not in use and diesel engines are turned off whenever the vehicle is stationary. The number of ABP collections varies with the production rate and the operating hours on different days of the working week.

The blood tank is emptied daily and is regularly cleaned using an integrated Clean In Place (CIP) system. Blood tanker drivers connect to the external blood offloading point and link the outlet/exhaust of their tanker vacuum pumps to a flexible hose which is directly connected to the chemical scrubber abatement system extraction ducting. This operation takes around 20 minutes once per day.

The sludge tank on the Wastewater Treatment Plant (WWTP) is emptied twice per day by road tankers to remove wet sludge left over from the effluent treatment process. Sludge tanker drivers connect to the external sludge tank point to extract sludge from the WWTP into the vehicle's bulk liquid tank. This operation takes around 20 minutes twice per day with the vehicle's engine left idling to operate the extraction pump. Under Phase 2 WWTP sludge will be de-watered which will reduce sludge collections by 60%.

See the vehicle loading and unloading locations plan in Appendix 5.

This is a Medium noise risk area of the plant.

~~6~~5 Source Identification & Review

~~6.1~~5.1 Physical characteristics

The key plant and equipment (or operations) with the potential to give rise to noise is listed in Table 1 below:

Table 1 - Noise sources

Operation	Description
Site vehicle movements	HGVs bringing in live birds, ABP & waste collections, forklift trucks, HGVs of outgoing produce, reversing alarms, loading & unloading
Chillers	Condensers / fans, compressors, refrigerated trailers
Boilers	Modular and aeroscalder boilers for hot water supply
General plant & equipment	Fans, pumps, vacuum pumps, compressors, blowers, air extraction systems, abatement plant, stacks for emissions to air
General	Cleaning of plant, modules & vehicles, waste collections

Noise sources from our activities will have different and distinctive characteristics and the duration and frequency of noise will vary. These features are listed in Table 2 below:

Table 2 - Noise type by source

Type of noise	Potential source	Frequency/ duration*
Clatter or rattle	HGV & fork truck movements Equipment and belts Module offloading Module wash	Frequent & intermittent Periodic
Buzzing or beeping	Reversing vehicles warning alarms and other audible warning alarms if not using authorised white noise alarms	Frequent & intermittent
Whine or hum	Fans, compressors, condensers	Periodic or continuous
Roaring / rushing	Revving of HGV engines, , high pressure air lines, air brakes	Occasional, brief
Screech	Fan belts Vehicle brakes	Periodic or continuous Occasional, brief
Clangs, bangs, grinds and thumps	Maintenance workshop, vehicles, movement of containers by fork truck, unloading of materials	Frequent & intermittent
Tonal elements	Fans, blowers, condensers, vacuum pumps, stack gas efflux noise	Continuous & intermittent

* Overnight periods, limited vehicle movements, production lines and air extraction equipment switched off / ramped down

~~6.2~~5.2 Key Noise Control Measures

The following advisory measures are recommended to reduce noise impacts:

General Management

- It is important to reduce noise impact that an open dialogue is kept with nearby residents and any concerns they have in relation to noise are dealt with and followed up.
- Employees should be made aware and instructed to minimise noise break-out from all warehouse, factory and utility areas and keep doors closed.
- Management of the loading bays should introduce procedures to reduce the possibility of shutter doors and plant room doors being left open, drivers slamming doors, leaving engines idling, having radios on loud and causing unnecessary noise.
- Reduce the time spent for HGV's waiting at entrance gates by opening prior to HGV arrival or immediately upon arrival to minimise the impact of noise generated by engine idling.
- Ensure items of plant are regularly maintained so that noise is not unduly generated.

Plant & Utilities Management

- The chiller plant has acoustic louvres fitted on all external ventilation points and the condensers are specified to meet the sound pressure levels recommended by our noise consultants.
- Further noise attenuation measures are to be considered for the chiller enclosure for Phase 2.
- The fans on the process area chemical scrubbers are operated on a timer to ramp down overnight and are to be enclosed in acoustic enclosures for Phase 2.
- The blowers at the WWTP are housed in acoustic enclosures.
- The utilities building housing the boilers is fitted with louvered doors and is fully enclosed.
- WWTP building houses DAF and sludge dewatering plant under Phase 2.

HGV & Vehicle Movements

- For the management of deliveries and noise, refer to the Dept. of Transport's - Quiet Deliveries Good Practice Guidance – Key Principles and Processes for Community and Resident Groups, Feb 2015. https://www.gov.uk/government/publications/quiet-deliveries-demonstration-scheme
- HGV movements are minimised overnight.
- Traffic routes designed to minimise reversing of vehicles.
- Main weighbridge on yard used primarily with gatehouse weighbridge mostly as back up.
- Low volume broadband white noise reversing alarms should be used or reversing alarms are to be deactivated on site and a banksman used.
- The site speed limit is 5mph to avoid excessive bumping and jolting.
- The hardstanding and vehicle movement routes are maintained in good condition, inspected regularly and repaired as required to minimise potholes and other defects.
- Loading bay shutter doors gates should be closed once HGV have manoeuvred into the loading bay and engine switched off.
- When departing, HGV engines should be switched on before opening loading bay shutter doors.
- HGV engines should not be left to idle unless needed to power ancillary loading equipment
- Vacuum tankers collecting blood and sludge are scheduled between operational hours.
- Surfaces on which fork lift trucks operate are free from bumps and steps so that shocks to the fork suspension do not cause excessive impulsive noises and clatter.
- Where practicable (i.e. between trailers and delivery points) clearly mark work-site routes for the fork lift trucks so that rough or uneven surfaces are avoided.

Table 3 summarises the potential sources of noise at the installation and the factors which may influence noise levels and the potential for variations in noise.

Table 3 - Potential Noise Sources

Area / Source of Noise		Control measures	Factors that may influence emissions
1.	Lairage / Intake	Control of HGV movements within approved operating hours. Main weighbridge used – gatehouse weighbridge used as backup Lairage capacity allows live bird trailers to be unloaded & empty modules & trailers to be cleaned & reloaded inside Good condition of hardstanding and adherence of drivers to speed limits and reversing procedures. One way system for HGV vehicles reduces vehicle reversing warning beepers noise. Vehicles use broadband type reversing alarms Closure of doors at all times except immediate access / egress. Maintenance of air conditioning systems to prevent abnormal noise from wear and tear of fans / vibration etc. Sound insulation of buildings Holes and openings closed off Enclosed operations within buildings	Out of hours vehicle movements, unauthorised use of horns, non broadband reverse alarms, revving of engines, squeaking brakes, speeding, potholes & bumps, unaffixed loads. Poor maintenance, open doors , damaged building fabric
2.	Hang-on and bleeding, scalding & de-feather & Evisceration	Closure of doors at all times except immediate access / egress. Maintenance of aeroscalder, air conditioning systems to prevent abnormal noise from wear and tear of fans / vibration etc. Sound insulation of buildings Holes and openings closed off Enclosed operations within buildings	Poor maintenance, open doors, damaged building fabric
3.	Treating, processing and packing – flavouring of whole birds	Closure of doors at all times except immediate access / egress.	Poor maintenance, open doors , damaged building fabric
4.	Chilling & Packing	Continuous operation, invertors on condenser fans to minimise operation, located in plant room, insulated building fabric Attenuation of ammonia vents Noise attenuation of chiller enclosure for Phase 2 under assessment Low noise specification for condensers (1 water cooled, 1 air cooled)	Poor maintenance, open doors , damaged building fabric. Intermittent failure of solenoid switches (located inside chiller enclosure) Refrigerated trailers powered by diesel units being used instead of electric hook up points during loading / overnight

Area / Source of Noise		Control measures	Factors that may influence emissions
		Maintenance of refrigeration plant to prevent abnormal noise from wear and tear / vibration etc. Closure of doors at all times except immediate access / egress. Refrigerated trailer loading done in covered docks Refrigerated trailers use electric hook up points during loading & if held overnight	
5.	ABP handling and storage	Control of ABP HGV movements within approved operating hours. Availability of processing line / space in lairage to move live bird vehicles inside. Good condition of hardstanding and adherence of drivers to speed limits and reversing procedures. Closure of doors at all times except immediate access / egress. Maintenance of air extraction systems to prevent abnormal noise from wear and tear of fans / vibration etc. Adherence to procedures for collection of ABP & emptying blood tank Maintenance of vacuum pumps to minimise noise breakout.	Out of hours vehicle movements, unauthorised use of horns, non broadband reverse alarms, revving of engines, squeaking brakes, speeding, potholes & bumps, unaffixed loads Poor maintenance of vacuum pumps and extraction equipment, open doors , damaged building fabric
6.	Module washing, trailer washing & module return area	Closure of doors at all times except immediate access / egress. Maintenance of equipment and air extraction systems to prevent abnormal noise from wear & tear of moving parts, fans / vibration etc. Sound insulation of buildings Holes and openings closed off Enclosed operations within buildings	Poor maintenance, open doors , damaged building fabric
7.	WWTP	Maintenance of blowers and pumps to prevent abnormal noise from wear and tear / vibration etc. Noise enclosures around blowers	Poor maintenance of pumps and blowers Effectiveness of noise enclosures around blowers.
8.	WWTP sludge storage & handling	Enclosure of primary and divert tanks, DAF and dewatering plant inside buildings. Minimal sludge tanker movements & within approved operating hours, adherence to procedures for collection of sludge Maintenance of pumps to prevent noise form wear & tear / vibration	Poor maintenance, doors left open, damaged building fabric Out of hours vehicle movements, unauthorised use of horns, non broadband reverse alarms, revving of engines, squeaking brakes, speeding, potholes & bumps, unaffixed loads Poor maintenance of pumps

Area / Source of Noise		Control measures	Factors that may influence emissions
9.	Main extraction and air treatment system	Timer on process area scrubbers to ramp down fans overnight Maintenance of scrubbers and extraction systems to prevent abnormal noise from wear and tear / vibration etc.	Poor maintenance, ID fan belt noise, vibration in stacks, doors left open, damaged building fabric, extraction units / process area scrubbers left on full power overnight
10.	Utilities	Closure of doors on utilities building at all times except immediate access / egress. Maintenance of equipment to prevent abnormal noise from wear and tear of moving parts, fans / vibration etc. Timers on boilers to shut down / ramp down overnight	Poor maintenance, ID fan belt noise, vibration in stack, doors left open, damaged building fabric
11.	Vehicle Loading and Unloading Operations	Control of HGV movements within approved operating hours. Gatehouse weighbridge mostly used as back up - main weighbridge onsite is not in direct line of sight to closest noise receptor A Good condition of hardstanding and adherence of drivers to speed limits and reversing procedures. One way system for HGV vehicles reduces vehicle reversing warning alarms noise and broadband alarms used Closure of doors at all times except immediate access / egress. Refrigerated trailers connected to electric hook up points during loading – on board diesel units only turned on when trailer is loaded & ready for departure Loaded refrigerated trailers held overnight hooked up to electric points	Out of hours vehicle movements, unauthorised use of horns, revving of engines, non broadband reverse alarms, squeaking brakes, speeding, potholes & bumps, unaffixed loads. Open doors Refrigerated trailers powered by diesel units being used instead of electric hook up points Contractor vehicles with non-broadband reversing beepers Correct driver behaviours are enforced via training and use of company disciplinary policy i.e. no unauthorised use of horns, revving of engines, radios in cabs will not be operated at excessive levels, speeding is prohibited. Vehicles are well maintained under service contract to prevent squeaking of brakes, Door control is enforced via training and use of company disciplinary policy, i.e. all external doors are closed when not in use. Compliance with use of electrical hookups is enforced via training and use of company disciplinary policy, i.e. use of diesel prohibited. All company vehicles have non-broadband reverse alarms.

Area / Source of Noise	Control measures	Factors that may influence emissions
		Contractors are requested to only use vehicles with non-broadband reverse alarms when on site. Yard is maintained in good order to prevent rumble and vehicle slap noise from poorly maintained surfaces.

~~7~~6 Noise Risk Assessment

Our original Planning Consent required that the rating level of any noise generated due to this installation shall not exceed the pre-existing background level by more than 5dB(A) at any time. Our Phase 1 noise impact assessment supported our original planning application.

During Phase 1 we undertook a noise survey in July 2020 to investigate noise complaints from a residence in Pickhill Lane. This noise survey proved that under Phase 1, the installation increases the background levels at the closest residential receptors by less than 5dB(A). The survey recommendation to add attenuation to the one remaining ammonia vent on the chiller plant without attenuation has been completed.

This condition has since been retired and the more appropriate condition of 'not exceeding the background level at any time' is now the objective. This is to prevent 'background creep' a situation where the background noise level increases incrementally by developments over time, with the end result being a louder environment.

It is with this new condition in mind that we undertook a further assessment for Phase 2. The key noise sources for Phase 2 are shown on the installation plan in Appendix 2 of this NMP . We revised the noise impact assessment for Phase 2 alongside our resubmitted permit variation application in February 2023 to include the amended WWTP design. This noise impact assessment has been reviewed and updated again in September – October 2023 to address NRW's Schedule 5 Notice and has been considered alongside updating the NMP.

The key findings of the noise impact assessments for Phase 2 are:

For Sites B-D to the north, north-east and north-west, set against the existing operations it is determined the combined noise impacts of plant and heavy goods vehicle movements for daytime and night-time periods are indicated as likely to be low, depending on context. This is to be expected given observations made during surveys, whereby subjectively there were no adverse impacts on account of plant noise with the installation site fully operational.

To the west at Site A, for daytime the impact is predicted as likely to have an adverse impact, depending on context, and for night-time likely to be an indication of significant impact, again depending on context. Such adverse numerical impacts are based on previous modelling work for plant. This, however, leads to considerations on uncertainty, as during surveys when the installation site has been fully operational, when no untoward plant noise was evident and no adverse impacts were subjectively determined, either during the daytime or the night-time. It is considered noise ratings in this regard, allowing for a two-fold proposed increase in production, are not representative and as such cannot be sustained. Fixed plant is subject to theNoise Management Plan which is now being revised to improve noise control and in-turn noise emissions from the installation.

Concerning impacts to the west that are associated with heavy goods vehicles, these are predicted as low for daytime, and between low and less than adverse impact for night-time.

With on-going improvements at the installation, however, for noise-sensitive receptors to the north, north-east and north-west, recognised strategic criteria for acoustic amenity are not unduly compromised. For noise-sensitive receptors to the west, the main focus rests with plant noise which, under the revised Noise Management Plan seeks to sustain or provide betterment of in terms of installation noise impacts.

The recommendations from the noise impact assessment are to be addressed to ensure that noise levels should have a low impact at the receptors.

This will be achieved by:

- Amendments to the Noise Management Plan
- Improvement areas identified in Section 3.2 of this Noise Management Plan

~~7.1~~6.1 Potential impact of releases

We have also undertaken a qualitative assessment of the potential noise impact from the sources described above, which have been informed by the latest noise surveys and assessment

~~7.1.1~~6.1.1 Qualitative assessment of risks of potential impacts

The likelihood and frequency of exposure to any noise arising from the facility is determined by the magnitude of release, duration, time of day and the distance and direction of receptors in relation to the facility.

A qualitative risk assessment methodology has been used where a judgement of risk of an impact is assigned based on the 'Source-Pathway-Receptor' Model.
A subjective risk score has been calculated for each identified odour or noise source based on a potential Impact score "**I**" (scored from 1 to 5), which is a subjective measure of intensity/emission rates, multiplied by a Likelihood "**L**" score (also from 1 to 5). T

The overall risk score assumes that specified suitable control measures are in place, however, the bracketed scores with asterisks provide an assessment of the potential risk if controls are not effective or not effectively used/monitored.

The risk assessment has been based on the following risk matrix scoring system that is used widely in this and other sectors.

Risk Matrix		Likelihood				
		1 Rare	2 Unlikely	3 Possible	4 Likely	5 Almost certain
Impact Severity	1 Negligible	1	2	3	4	5
	2 Minor	2	4	6	8	10
	3 Moderate	3	6	9	12	15
	4 Major	4	8	12	16	20
	5 Catastrophic	5	10	15	20	25

For grading risk, the scores obtained from the risk matrix are assigned grades, as follows;

	1 – 4	Low risk	Broadly acceptable level of Risk
	5 – 9	Low - Medium risk	ALARP Risk is tolerable if risk reduction is impractical disproportionate to cost
	10 – 14	Medium - High risk	ALARP Risk is tolerable if is disproportionate to cost
	15 – 19	High risk	Unacceptable risk, cannot be justified except in extreme circumstances
	20 - 25	Extreme risk	Risk cannot be justified

ALARP – as low as reasonably practicable

The risk assessment is presented in Table 4 below:

Table 4 - Noise Risk Assessment & Key Noise Controls to Minimise Risk

Inventory			What can harm/ be harmed?			Managing the risk		Assessing the risk	
Source		Process (Location)	Hazard	Receptor see Receptor map in App 1	Potential Impact 'I'	Risk Management	Likelihood of exposure 'L'	Magnitude of Risk 'I' x 'L'	Overall Risk
1.	Lairage / Intake	North-east section of factory	Noise from HGVs and from lairage / intake buildings	Receptors A - D	2 - Minor	Control of HGV movements within approved operating hours. Availability of processing line / space in lairage to move live bird trailers inside. Good condition of hardstanding, speed bumps removed at site entrance and adherence of drivers to speed limits and reversing procedures / broadband alarms. One way system for HGV vehicles reduces vehicle reversing warning alarms noise Closure of doors at all times except immediate access / egress. Maintenance of air conditioning systems to prevent abnormal noise from wear and tear of fans / vibration etc. Attenuation installed on all outlets/inlets. Sound insulation of buildings Holes and openings closed off Enclosed operations within buildings	3 - Possible	6 – Low-Medium	Low - Medium if well managed.
					(4 – Major*)		3 - Possible	6 – Low-Medium	
2.	Hang-on and bleeding, scalding & de-feather & Evisceration	Central section of factory	Noise from internal process operations	Receptors B - D	1 - Negligible	Closure of doors at all times except immediate access / egress. Maintenance of aeroscalder, air conditioning systems to prevent abnormal noise from wear and tear of fans / vibration etc. Sound insulation of buildings Holes and openings closed off Fully enclosed operations within buildings	1 - Rare	2 - Low	Low

Inventory			What can harm/ be harmed?			Managing the risk		Assessing the risk	
Source		Process (Location)	Hazard	Receptor see Receptor map in App 1	Potential Impact 'I'	Risk Management	Likelihood of exposure 'L'	Magnitude of Risk 'I' x 'L'	Overall Risk
3.	Treating, processing and packing – flavouring of whole birds	South of the main building opposite side close to Pickhill Lane	Noise from internal process operations	Receptors B - D	1 - Negligible	Fully enclosed operations within buildings Closure of doors at all times except immediate access / egress.	1 - Rare	2 - Low	Low
4.	Chilling & Packing	North-west corner close to Pickhill Lane	Noise from condensers / breakout from vents	Receptor A – main chiller. Receptor B – chilled dispatch	2 - Minor	Continuous operation, invertors on condenser fans to minimise operation, located in plant room, insulated building fabric. Attenuation of ammonia vents Review of attenuation of chiller plant / enclosure for Phase 2 Low noise specification for condensers Maintenance of refrigeration plant to prevent abnormal noise from wear & tear / vibration etc. Closure of doors at all times except immediate access / egress. Refrigerated trailer loading done in covered docks and electric hook up points.	3 - Possible	6 – Low-Medium	Low - Medium if well managed.
					4 - Major*)		3 - Possible	6 – Low-Medium	
5.	ABP handling and storage	Northern section of factory	Noise from HGVs, tanker vacuum pumps and from inside	Receptors A – D	2 - Minor	Control of ABP HGV movements within approved operating hours. Good condition of hardstanding and adherence of drivers to speed limits and reversing procedures / broadband alarms. Closure of doors at all times except immediate access / egress. Maintenance of air extraction	3 - Possible	6 – Low - Medium	Low - Medium if well managed.

Inventory			What can harm/ be harmed?			Managing the risk		Assessing the risk	
Source		Process (Location)	Hazard	Receptor see Receptor map in App 1	Potential Impact 'I'	Risk Management	Likelihood of exposure 'L'	Magnitude of Risk 'I' x 'L'	Overall Risk
			storage buildings		(4 - Major*)	systems to prevent abnormal noise from wear and tear of fans / vibration etc. Adherence to procedures for collection of ABP and for emptying blood tank Maintenance of vacuum pumps to minimise potential for noise breakout.	3 - Possible	6 – Low - Medium	
6.	Module washing, truck wash & module return area	Southern section of factory	Noise from inside building	Receptors C & D	2 - Minor	Closure of doors at all times except immediate access / egress. Maintenance of equipment and air extraction systems to prevent abnormal noise from wear and tear of moving parts, fans / vibration etc. Sound insulation of buildings Holes and openings closed off Enclosed operations within buildings	2 – Unlikely	4 - Low	Low
7.	WWTP	Eastern edge of site activities	Noise from WWTP equipment	Receptors B – D	2 - Minor	Maintenance of blowers and pumps to prevent abnormal noise from wear and tear / vibration etc. Effectiveness of noise enclosures around blowers. Primary and divert tanks enclosed. DAF and sludge dewatering plant inside buildings.	2 – Unlikely	4 - Low	Low if well managed. *Night time disturbance possible if controls fail

Inventory			What can harm/ be harmed?			Managing the risk		Assessing the risk	
Source		Process (Location)	Hazard	Receptor see Receptor map in App 1	Potential Impact 'I'	Risk Management	Likelihood of exposure 'L'	Magnitude of Risk 'I' x 'L'	Overall Risk
					(3 – Moderate*)		(3 – Possible*)	(9 – Low-Medium*)	
8.	WWTP sludge storage & handling	Eastern edge of site activities	Noise from HGVs and tanker vac pump	Receptors B – D	2 – Minor	Standby use only under Phase 2 with new sludge dewatering plant inside building. Control of sludge tanker movements within approved operating hours. Adherence to procedures for collection of sludge Maintenance of pumps to prevent noise from wear and tear / vibration	2 – Unlikely	4 – Low	Occasional use as back up. Low if well managed. *Short duration night time disturbance possible if controls fail
					(3 – Moderate*)		(3 – Possible*)	(9 – Low - medium*)	
9.	Main extraction and air treatment system	To east of main factory building	Noise from scrubber fan / efflux noise from stack	Receptors B – D	2 – Minor	Timer operation of scrubbers to ramp down fans overnight Maintenance of scrubbers and extraction systems to prevent abnormal noise from wear and tear / vibration etc. Acoustic attenuation for all input/output vents	2 – Unlikely	6 – Low - Medium	Low
					3 – Moderate		(3 – Possible*)	6 – Low - Medium	

Inventory			What can harm/ be harmed?			Managing the risk		Assessing the risk	
Source		Process (Location)	Hazard	Receptor see Receptor map in App 1	Potential Impact 'I'	Risk Management	Likelihood of exposure 'L'	Magnitude of Risk 'I' x 'L'	Overall Risk
10.	Utilities	Eastern edge of site activities	Noise from inside building / stacks	Receptors B – D	2 – Minor	Closure of doors on utilities building at all times except immediate access / egress. Maintenance of equipment to prevent abnormal noise from wear and tear of moving parts, fans / vibration etc. Timers on boilers to shut down / ramp down overnight	2 – Unlikely	4 – Low	Low if well managed. *Night time disturbance possible if controls fail
					3 – Moderate		(3 – Possible*)	(9 – Low - medium*)	
11.	Vehicle Loading and Unloading Operations	Entire installation	Noise from vehicle movements & loading / unloading	Receptors A-D	2 – Minor	HGV movements in approved operating hours. Gatehouse weighbridge mostly used as back up - primary weighbridge onsite is not in direct line of sight to closest noise receptor A Good condition of hardstanding, speed bumps removed at site entrance and adherence of drivers to speed limits and reversing procedures. One way system for HGV vehicles reduces vehicle reversing warning alarms noise and broadband alarms used Closure of doors at all times except immediate access / egress. Refrigerated trailers connected to electric hook up points during loading. On board diesel units only turned on when trailer is loaded & ready for departure Loaded refrigerated trailers held overnight hooked up to electric points	2 – Unlikely	4 – Low	Low if well managed. *Night time disturbance likely if controls fail
					4 – Major		(4 - Likely*)	16 - High	
(*)risk of abnormal events, e.g., failure of noise control systems and / or non-adherence to procedures									

~~8~~7 Management of noise

This NMP is a working document, intended to be used as a reference document for operational staff on a daily basis. It provides a schedule of actions that must be taken to minimise noise impact and details site management procedures for the management of noise.

The NMP is available on-site to all relevant site personnel and any visiting officers from Wrexham County Council or NRW.

Our environmental management system (EMS) addresses noise and we will use and review the NMP to ensure we minimise noise from the installation. The management systems include:

- Staff roles and responsibilities
- Training of staff
- Operating procedures
- Auditing and inspections
- Preventative and breakdown maintenance
- Housekeeping standards
- Incidents and emergency response
- Complaint handling and investigation
- Community liaison

The remainder of this document is structured according to aspects of the operation and management of the site.

All measures, contained in this NMP are to be implemented in the routine operation of the site. Additional measures that may be adopted in response to incidents or one-off events are detailed in the contingency procedures section.

~~9~~8 Roles & Responsibilities

~~9.1~~8.1 Site Management

The overall implementation of this NMP is the responsibility of the General Manager, supported as required by other Maelor Foods staff with specific roles relating to noise control. The roles and responsibilities of staff are documented under the EMS.

The General Manager can delegate certain tasks as required, although ultimate responsibility will remain with him / her.

A nominated deputy can be appointed for all times when the General Manager is not on site. In such circumstances, it will be the nominated deputy's responsibility to ensure that the requirements of the NMP are adhered to.

~~9.2~~8.2 Staff Training

Staff training is a key aspect of ensuring that noise is controlled through effective management during daily operations. All key site operatives involved in "noise" related areas of the plants and particularly maintenance personnel must be trained on induction with "tool-box talks" to deal with noise management issues in the areas in which they will work. They must also be made aware of the existence of this NMP and its requirements through environmental training tailored to staff responsibility levels.

Training needs are reviewed for all staff on an annual basis and refresher training scheduled at set intervals. General noise management forms part of the site induction process to all new members of staff or contractors working in potentially noisy areas of the plant.

Where investigation of an incident identifies a gap in training or a need for refresher training this will be carried out as soon as possible.

~~9.3~~8.3 Operating Procedures

All departments have a set of operating procedures that cover specific and generic tasks. These procedures identity areas where noise could be released and specify the measures that must be taken to ensure that noise is minimised. The procedures cover the measures to be taken if abnormal events occur such as plant failures and spell out the reporting and recording criteria if abnormal events occur.

Plant whose failure could cause a noise event is covered by operational procedures.

~~9.4~~8.4 Maintenance

Any plant item whose failure could cause a noise event is covered on the preventative maintenance (PM) system which schedules a series of maintenance tasks at set frequencies. The PM system includes regular checks and maintenance of doors, extraction systems, building fabric, odour abatement plant, WWTP and process plant to minimise failure events and keep noise control optimised. The tasks and their frequency are based on plant manufacturer's guidance or site experience of operating the plant.

We hold stocks of essential spare parts, so plant can be repaired as soon as possible, and we have same day call out contracts for the main elements of the plant if specialist help is required.

Breakdown maintenance is prioritised if there is potential for or an increase in noise. We will undertake a bespoke environmental risk assessment if we need to undertake maintenance tasks that could create an elevated noise risk and will identify precautions and additional measures that we must take to control noise during the work. This could include work on building doors or roof if they need to be opened for prolonged periods. Wherever possible, we will schedule such work for non-production days to minimise the potential for noise events to disturb site neighbours. We may also issue neighbourhood bulletins to advise neighbours in advance of such work.

There is a clear structure of responsibility which allows operational staff to call in specialist contractors to deal with emergencies and unplanned events which may lead to a noise impact, such as damages to extraction ducts etc.

Such events, and appropriate remedial measures are normally the responsibility of the Site Manager, but lines of responsibility and delegation will be clarified in case the manager is off site when an unplanned

event occurs. A list of approved contractors who can be called out to deal with incidents is maintained by the Engineering Manager and all staff with delegated responsibility are aware of this list.

~~9.5~~8.5 Sub-Contractors

Any sub-contractors working at the site must adhere to the requirements of the NMP. Failure to comply with noise control measures will result in a formal warning to the operative and his or her employer. Failure to comply with the warning will result in the operative being banned from the site.

~~9.6~~8.6 Measures for Reducing Noise Levels On-site – Auditing and Inspections

Maelor Foods will address all reasonable opportunities to reduce noise levels from the site. Measures for reducing the risk have been detailed throughout the document. Audits and inspections are carried out across departments covering housekeeping and adherence to procedures where they address noise. Departmental Managers will also undertake their own checks, inspections and audits as part of the shift handover process.

The specific noise management and noise related checks and tasks are listed in Table 5 below. This list must be reviewed as experience of the plant is collected and if incident investigations identify any areas for improvement:

Table 5 – Routine Noise Management & Monitoring Tasks / Checks

No.	Tasks	Who?	Targets/Action Levels	Record form
1	Inspect the site for excessive noise levels at least daily during the hours of production (including during the night) and record the findings to determine trends. Frequency to be increased in event of complaints	Environmental Manager/ Hygiene Manager and Security	Checks to include: 1. Not >1 live bird delivery waiting to get into the lairage 2. Doors closed on lairage & ABP storage building when not in use for vehicle movements 3. Doors closed on other process buildings 4. Chiller plant building – no abnormal parameters or noise 5. WWTP area – No abnormal parameters or noise 6. Chemical scrubber area – no abnormal parameters or noise 7. Utilities building – no abnormal parameters or noise 8. External hard standings / vehicle pathways are free of any bumps, holes, obstructions 9. Drivers observe site speed limit and consider neighbours when entering site 10. Reversing beepers disengaged on vehicles / broadband noise alarms used 11. External fork trucks use broadband reversing alarms	Combined Noise / Sniff survey record form EMS9.3.1.1.4 – Appendix 3
2	Site perimeter noise assessments at different times of day. To be conducted alongside odour SNIFF assessments	Environmental Manager/ Hygiene Manager and Security	Detectable/recognisable noise. Back track if elevated or abnormal noise is detected and carry out site checks as set out at 1 above.	Combined Noise / Sniff survey record form EMS9.3.1.1.4 – Appendix 3

~~10~~9 Abnormal Events and Emergency Operation

We have contingency measures to deal with the foreseeable abnormal events that could influence noise levels from the installation. Table 6 describes several abnormal events or emergencies which may take place at the site and lead to elevated noise levels and lists the response measures.

Table 6 - Abnormal Events and Emergency Operation

Scenario / Event	Location on Site	Likely effect on emissions inventory	Response Measures
Failure of noise control measures, e.g. doors not closing or building fabric / attenuation damage, excessive wear on plant	Site	The control measures proposed are all simple and low tech so the risk of failure is low. If failures do occur, then the potential effect would be an increased risk of off-site effects	All maintenance staff to be trained in identifying problems with control equipment or systems and applying simple fixes. For mechanical plant, such as fans and scrubber dosing and liquor circulation pumps, a supply of essential spares will be kept on site. Refrigeration & WWTP plant engineers available on call
Unavailability of site staff	Site	Incidents occurring outside of site hours may be exacerbated by lack of staff available to attend.	Emergency contact details to be agreed such that someone is available on call to address issues which may arise.

Our Emergency Response Plan covers the generic aspects of how to respond and who to notify. We also have more specific procedures such as a spillage procedure to cover types of incidents. Other events are covered in our standard operating procedures such as how to address effluent treatment plant faults.

We treat door faults, extraction or abatement plant failures and any other incidents that cause or could lead to a noise increase as an environmental incident. Such incidents are handled in accordance with our Incidents & Non-conformances Procedure and we will ensure they are fully investigated and recorded once resolved, with preventative and corrective actions.

We will report incidents to NRW in accordance with our Environmental Licence Reporting Procedure of and Schedule 5 of our environmental permit. These notifications comprise of an initial report to notify NRW of a potentially significant incident as soon as possible followed by a report covering the incident investigations and conclusions.

~~11~~10 Record keeping

Throughout the whole of the NMP, accurate and thorough record keeping are essential to ensure noise is controlled and will allow us to review and analyse performance. We keep records of maintenance of plant, production, waste management, monitoring, audits and inspections, communication, incidents, complaints and training.

Our Production Managers are responsible for keeping records of vehicle arrivals, departures, load details, materials processed and records of any incidents or issues that occur. They also maintain a shift log of processing stages which detail any abnormal events or faults requiring maintenance.

~~12~~11 Noise Complaints Procedure

The measures outlined in this NMP are aimed at preventing excessive noise occurring to the extent where complaints may be made by neighbours of the site. Nevertheless, it is recognised that having an established complaints procedure is a necessary part of the NMP and we have a generic Environmental Complaint Procedure which we use for this purpose.

The primary purpose of this complaint procedure is to ascertain whether any complaints are linked to the site and associated operations and, if so, to identify the cause(s) and what action may be taken to remedy any on-going complaint episode and to prevent or minimise the probability of a recurrence. All complaints and investigations into them are recorded on an Environmental Complaints Record Form.

~~13~~12 Noise Monitoring

There is no routine quantitative noise monitoring undertaken on or around the site. Should noise complaints be verified and Maelor Foods' operations substantiated or suspected as the source, we will use our noise consultant to investigate. This may include qualitative and / or quantitative noise monitoring to identify the extent of any nuisance and to investigate any on site sources and advise on any noise mitigation measures.

~~14~~13 Community Liaison

It is important to reduce noise impact that an open dialogue is kept with nearby residents and any concerns they have in relation to noise are dealt with and followed up.

We appreciate how important it is that our neighbours who could potentially be affected by noise from the plant are made aware that we take noise control very seriously and take all reasonable measures to reduce our environmental impact on the local community. Our neighbours will be kept informed of new developments and if requested, we will issue contact details for them to notify the company or to complain in the event of unacceptable noise being experienced.

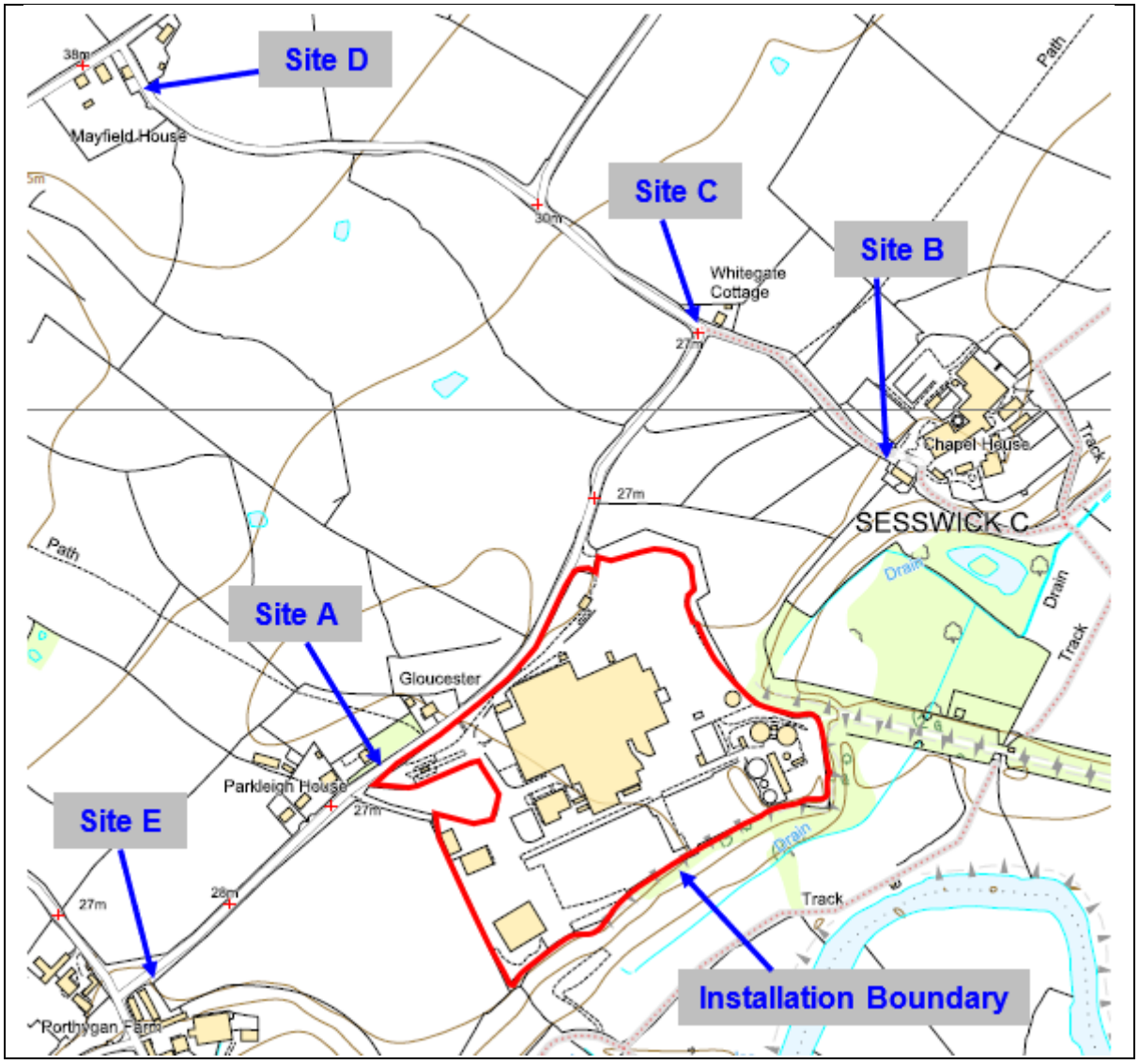
Our neighbours are encouraged to report any nuisance noise at the time they are experienced so that timely investigations can be carried out.

~~15~~14 Appendices

Appendix 1 – Potential Noise Sensitive Receptors

The site location and potential residential noise receptors are shown in Figure 1.

Figure 1: Site location and potential residential noise receptors



A. Marlbrook House, Pickhill Lane (opposite to Maelor Foods site entrance)
B. Pickhill Old Farm complex / Pickhill Equestrian Centre, off Pickhill Lane
C. White Gate Cottage, Pickhill Lane
D. Mayfield House, Talwrn Lane
E. Porthygan Farm, A525 Wrexham Road

Appendix 2 – Site Noise Source Locations – Phase 2

The site source locations are shown in Figure 2.

Figure 2: Maelor Foods site and plant noise sources (Phase 1) – to be updated with Phase 2 sources above to reflect final layout.



Main chiller plant

- **ammonia refrigeration plant and condensers enclosure:** 1 air cooled and 1 water cooled condenser added for Phase 2. Inverter reduces / increases load with production demands - switched off when no duty required.
- **ammonia plant duct:** Extract ventilation duct

Vacuum System: Noise breakout from the internal vacuum system operational 05.00 - 22.00hrs.

Chemical Air Scrubbers: Operational at design duty 05.00 – 21.00hrs with a timer set to reduce fan speed 21.00 – 06.00hrs. 2nd unit added for Phase 2.

Water Softening Plant: Continuously in operation.

Aeration Tank: Two enclosures, one with 2 x Aerzen D52S blowers and the other with 1 x Landia DK-6940 blower. (2 duty, 1 standby)

MBR Tank: Enclosure(s), 2 x Aerzen D52S blowers (1 duty, 1 standby) added for Phase 2

Appendix 3 – Daily Environmental Check Sheet

Daily Environmental Check Sheet

maelor FOODS

General Information

Inspection Date	Inspection Time	Weather Conditions	Temperature	Wind Direction	Wind Strength

Odour Survey

Location	Time	Nature of Odour	Odour Severity	Extent/ Persistence	Noise Level (dB)
1					
2					
3					
4					
5					
6					

Scoring Guide			
	Nature	Severity	Persistence
0	No Odour	No Odour	No Odour
1	Lairage/ Chicken	Very Weak	Localised, not off site
2	Defeather/ Aero scald	Weak	Offsite for brief period
3	Offal	Distinct	Persistent but localised
4	Effluent	Obvious	Persistent over narrow range
5	Sludge	Strong	Persistent over wider range
6	Blood Tanks	Very Strong	
7	Other (Describe)	Extremely Offensive	



ETP Alarm Y/N		Cyclone Alarm Y/N		Cyclone Redox:		Cyclone pH	
Main Scrubber Alarm (Y/N)				Scrubber Redox		Scrubber pH	

General Site Management

Question	Yes/ No
Are vehicles observing speed limits?	
Are FLTs driving safely and loads secure?	
Are external yard areas clean and free of spills?	
Are spill kits sealed and contents full/ unused?	
Are correct containers being used/ labelled?	
Are noise controls working around the site?	
Are all chemicals bunded/ stored correctly?	
Are bunds in good condition/ no leaks?	
Is site drainage colour coded?	
Are hardstanding areas in good condition?	
Cleaning activities in correct area?	
W2 and W3 free of visible oil/ grease?	
Borehole secure and free from obstruction?	

Completed By	
Signature	

Odour Management

Question	Yes/ No
Is there more than 1 vehicle waiting	
Are all offal/ lairage doors closed?	
Is lairage area clean	
Are all other process doors closed?	
Is offal bay clean and in good condition?	
Is blood tank area clean?	
Is ETP area clean?	
Are all carbon filters working?	
Are all Dolavs covered?	
Is sludge tank back venting (where applicable)?	
Other Comments/ Actions:	

Document Reference: EMS9.3.1.1.4	Issue Date: 20/04/2021	Issue Number: 4
Issued By: Suzanne Gray	Approved By: James Colley	

Appendix 4 – Environmental Complaint Record Forms

Date of Complaint	Time of Complaint	Date Noticed	Time Noticed

Name and Address of Complainant	
Description of Odour (what does it smell like?)	

Odour Severity	1 Very Weak	2 Weak	3 Distinct	4 Obvious	5 Strong	6 Very Strong	7 Extremely Strong
	Probably unnoticed whether odour present	Odour character barely recognisable	Odour character is recognisable	Odour character is easily recognisable	Odour may be offensive / persistent	Odour is offensive – exposure considered undesirable	Odour is offensive, instinctive reaction to avoid further exposure

Constant or Intermittent		Duration	
Does the complainant have any other comments about the odour?			
Are there any other complaints relating to the installation, or to that location?		If yes please give details (dates etc.)	

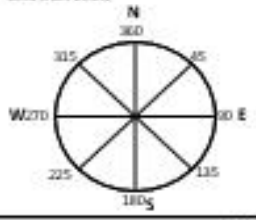
Location of complaint

Please mark on map location of complaint.

Wind Direction Log

	Time	Direction
30 minutes before complaint	15.00	30
20 Minutes before complaint	15.10	98
10 Minutes Before Complaint	15.20	5
Time of Complaint	15.30	303
10 minutes after complaint	15.40	304
20 minutes after complaint	15.50	252
30 minutes after complaint	16.00	174

Plot the above direction data onto the wind chart below





Weather Information (Please attach screenshot of weather station data log)

Weather Conditions	Average Wind Speed	Average Wind Direction	Average Temperature

Operating Conditions at time of complaint

Describe what was happening on site at the time? Any abnormal events, weather conditions or maintenance issues at the time or ongoing? E.g. power cut, abnormal weather (very hot or cold), chemical scrubber or ETP fault?	
ABP and sludge collection times	

Complaint Report Form	
Time and date of complaint:	Name and address of complainant:
Telephone number of complainant:	

Date noticed:	
Time noticed:	
Location, if not at above address:	
Weather conditions (i.e., dry, rain, fog, snow):	
Temperature (very warm, warm, mild, cold or degrees if known):	
Wind strength (none, light, steady, strong, gusting):	
Wind direction (e.g. from SW):	
Complainant's description of odour or noise or other nuisance: o What does it smell or sound or look like?	
o Severity (see below):	
o Duration (time):	
o Constant or intermittent in this period:	
o Does the complainant have any other comments about the odour or noise or other nuisance?	
Are there any other complaints relating to the installation, or to that location? (either previously or relating to the same exposure):	
Any other relevant information:	
Do you accept that odour or noise or other nuisance is likely to be from our activities?	
What was happening on site at the time?	
Operating conditions at time of occurrence (e.g. odour abatement plant parameters, ABP's collections etc.):	
Actions taken:	

Form completed by:	Date	Signed

ODOUR SEVERITY KEY	NOISE SEVERITY GUIDE
0 - No Odour Present - no odour perceived **1 - Very Weak - probably some doubt whether odour present** **2 – Weak - odour character is barely recognisable** **3 – Distinct - odour character is recognisable** **4 – Obvious - odour character is easily recognisable** **5 – Strong - odour may be offensive if persistent** **6 - Very Strong - odour is offensive, exposure to this level considered undesirable** **7 - Extremely Strong - odour is offensive, instinctive reaction to avoid further exposure**	**0 - No Noise Present - no noise perceived** **1 - Very faint - probably some doubt whether noise present** **2 – Faint - noise character is barely recognisable** **3 – Distinct - noise character is recognisable** **4 – Obvious - noise character is easily recognisable** **5 – Loud - noise may cause minor annoyance - disruption of tranquillity** **6 - Very Loud - moderate annoyance – must talk louder** **7 - Extremely Loud - serious annoyance – forced to go inside**

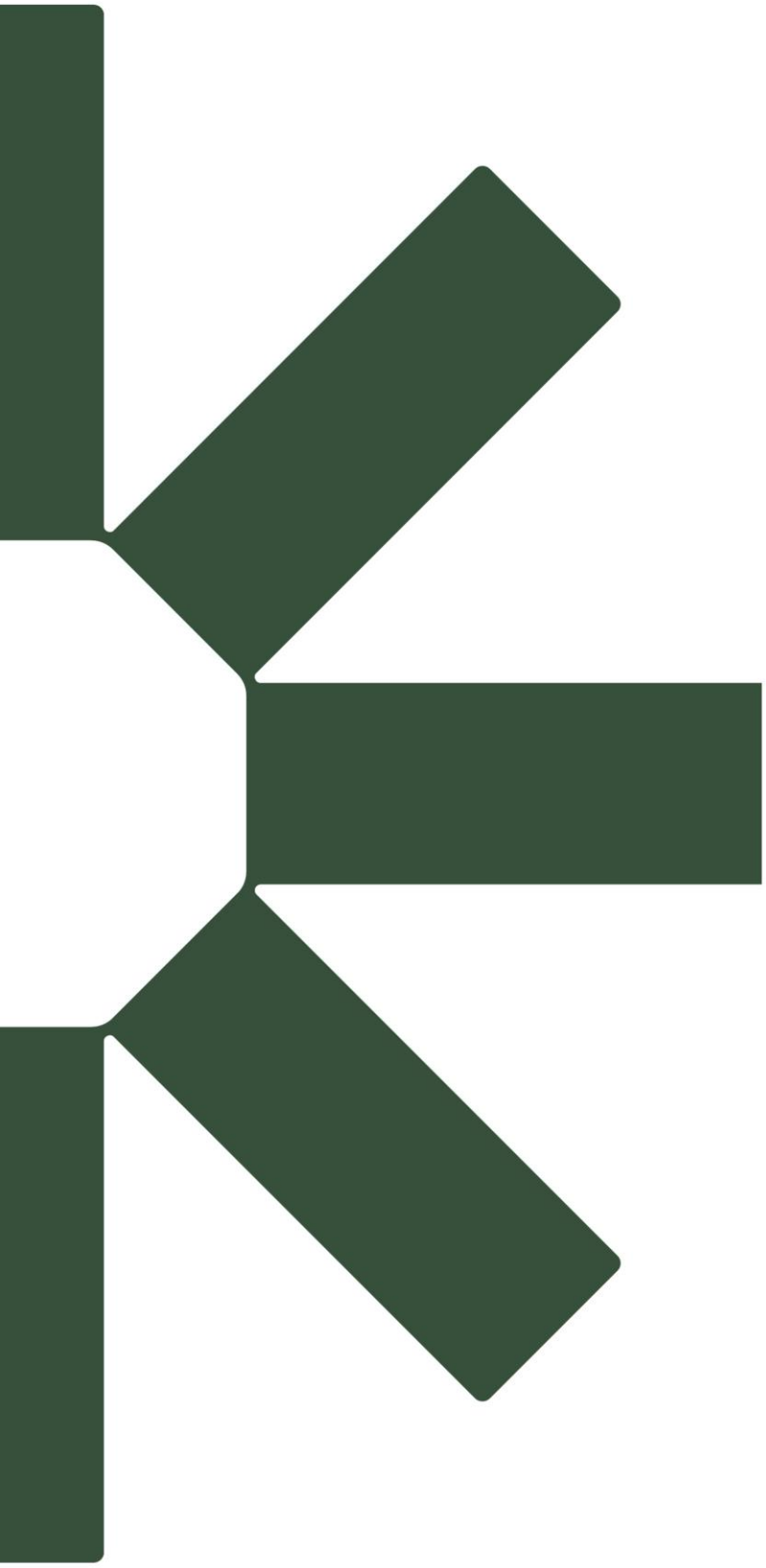
Appendix 5 – Plan of Vehicle Loading & Unloading Activities

The site source locations are shown in Figure 3.

Figure 3: Maelor Foods site showing locations of vehicle loading & unloading activities



	WWTP Sludge Collections
	Main HGV Trailer Weigh Bridge
	Vehicle Fuelling Station / Ad Blue
	ABPs Bays
	Lairage
	Vehicle Sanitisation
	Refrigerated Vehicle Unloading
	Refrigerated Vehicle Loading
	Gate House Weigh Bridge
	Intake



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