Best Available Techniques Assessment

Site name: **Ling Road Materials Recovery Facility**

Site address: **Ling Road, Mannings Heath, Poole, Dorset, BH12 4PY**

Operator name: **W & S Waste Management Limited**

Written by Emily Pitts, Shann Pitts Consulting, 4th March 2022

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1. Introduction

Ling Road Materials Recovery Facility (MRF) will be operated by W&S Waste Management Limited (W&S) at the purpose- built site on Ling Road, Mannings Heath, Poole, Dorset, BH12 4PY (the site).

A Best Available Techniques (BAT) Assessment has been prepared by Shann Pitts Consulting Limited on behalf of W&S to support an environmental permit application for a new bespoke installation permit for the operation of the MRF.

This report compares the proposed operation, activities, infrastructure, management systems, etc., against the requirements of indicative BAT as stated in Non-hazardous and inert waste: appropriate measures for permitted facilities[1] (hereafter referred to as 'Appropriate Measures') currently issued in draft form for consultation and Best Available Techniques Reference Document for Waste Treatment[2] to ensure that all relevant areas are included.

The aim of this report is to provide confidence to the Environment Agency that W&S has both considered the requirements of BAT and will operate the site in compliance with the requirements of indicative BAT.

The report is structured in table format in the same order as set out in the 2020 Appropriate Measures document to ensure a logical review of the requirements of indicative BAT. Next to each relevant requirement there is a summary of the proposals and a comparison against indicative BAT.

The final section comprises conclusions and recommendations.

[1] Non-hazardous and inert waste: appropriate measures for permitted facilities, Environment Agency, July 2020 consultation draft

[2] Best Available Techniques (BAT) Reference Document for Waste Treatment, European IPPC Bureau, 2018

2. Assessment of Appropriate Measures

Appropriate Measure	Assessment of Compliance
Site Design & Suitability	
You should consider the potential impacts of climate change when selecting a site especially: • flood risk • drought • extreme temperatures • extreme weather events	Condition 12 of the approved Planning Permission states that: *Unless otherwise agreed in writing with the Local Planning Authority, the office elements of the development hereby permitted shall achieve a minimum BREEAM "Very Good" (or equivalent standard).* *Prior to first occupation of the office building, the Post-Construction Review Certificate shall be submitted to the Local Planning Authority verifying that the standards referred to in the Design Stage Certificate have been met.* BREEAM is Building Research Establishment Environmental Assessment Method. The site is in a Flood Zone 1 which means that there is a less than 1 in 1,000 annual probability of river or sea flooding.[3] A preliminary flood risk assessment[4] was carried out as part of the planning application and climate change was considered with respect to flood risk. It was concluded that this would not significantly increase the flood risk to the existing development. The Climate Change Risk Screening which was carried out as part of the permit application (Part B3 of the application form) resulted in a screening score of 3 meaning that a Climate Change Risk Assessment did not have to be submitted with the application.

[3] https://flood-map-for-planning.service.gov.uk/summary?easting=403742&northing=94068 Accessed 27th January 2021
[4] Preliminary Flood Risk Assessment, JB-1340, Calcinotto, November 2012

Appropriate Measure	Assessment of Compliance
	Design features that mitigate against extreme weather include lightning protection on buildings and surge protection on electricity distribution network and data storage devices.
You should have enough space on site to manage wastes and to make sure that you minimise potential pollution impacts on nearby receptors. For example, you should have enough space for appropriate fire breaks between stockpiles of combustible waste, and to allow access for fire-fighting. The storage and handling of waste on site must be located as far as technically and economically possible from sensitive receptors and watercourses, while minimising unnecessary handling. Access doors should be on the side of buildings opposite to sensitive receptors.	The building design and layout is bespoke to ensure that all of the proposed waste streams can be stored and treated with adequate space for fire breaks where required. This is detailed in the **Fire Prevention Plan (MS317)** which accompanies this permit application.[5] The sizing of the building has also allowed contingency for future expansion of the materials recovery operations subject to the relevant permissions. Waste treatment operations will be carried out within the building; the west section of the building where the shredding and screening of bulky waste will take place will benefit from speed doors and a dust extraction and abatement system. The risks to watercourse are controlled through the use of an impermeable surface and drainage to the foul sewer where appropriate. The surface water drainage area benefits from an interceptor and an attenuation tank which can be utilised to capture any spillages.
You must have enough space on site to operate your plant and equipment safely, and to segregate waste to prevent cross-contamination.	See above in terms of availability of space on site and as detailed in the FPP.[5]
Environmental permits set limits on the amount of waste an operator can bring onto site on an annual basis. The permit may also set other capacity limits, for example the maximum quantity of a particular waste type at any one time. The physical capacity of your site may not be large enough to safely handle, without causing pollution, the amount of waste your permit allows.	The building has been designed to safely handle the proposed tonnages. It is understood that through the permit determination process, limits will be set in accordance with the information provided and Environment Agency assessment.

[5] Fire Prevention Plan- Ling Road MRF (MS317), June 2021

Appropriate Measure	Assessment of Compliance
You must make sure that the quantities of waste at your facility are manageable at all times and do not exceed your capacity to store and treat waste.	
At the design stage you should consider: • how you will monitor emissions from your site • the access to waste treatment processes so you can take representative samples	There will be no point source emissions to land. Emissions to the foul sewer in accordance with a Trade Effluent Consent will be monitored at the dedicated sample point. There will be provision to sample emissions of surface water to the surface water sewer. Point source emissions to air will be monitored at EP3 (Dust abatement plant stack) in accordance with BAT 8 and BAT 25 (see Section 3). Fugitive emissions will be assessed on site, at the site boundary and off site in accordance with the environmental management system. Waste sampling is not proposed or appropriate for the proposed waste streams.
General management appropriate measures	
Management system	
You must have an up-to-date written management system, and activities at your facility must follow it. Your management system must incorporate the following features.	W&S have an Environmental Management System (EMS) which is accredited under ISO 14001:2019.
You have: • management commitment, including from senior managers • an environmental policy that is approved by senior managers and includes the continuous improvement of the facility's environmental	There is senior management commitment as required under ISO 14001. There is an **Environmental Policy (DOC-02)** in place which includes a commitment to *'the continual improvement of our management and operations'* and to *'regularly review environmental performance and set objectives and targets to achieve continual improvement'*. The Environmental

Appropriate Measure	Assessment of Compliance
performance, so you can identify pollution risks and minimise them through appropriate measures	Policy is signed by Geoffrey Thompson, a Director of W&S Waste Management Limited.
You plan and establish the resources, procedures, objectives and targets needed for environmental performance alongside your financial planning and investment.	The EMS is wholly integrated into the business such that requirements for environmental performance are considered alongside financial planning, and investment. This is a requirement under ISO 14001.
You implement your environmental performance procedures, paying particular attention to: • staff structure and relevant responsibilities • staff recruitment, training, awareness and competence • communication (for example of performance measures and targets) • employee involvement • documentation • effective process control • maintenance programmes • management of change • emergency preparedness and response • making sure you comply with environmental legislation	• Environmental performance procedures are implemented and include roles and responsibilities. • There is a staff organogram which shows the overall company structure. Also **Environmental Working Group New Structure (MS030)**. • There is an **Environmental Training and Records Procedure (OP-06)** in place. Training is recorded in the **Training Record (Environmental) (ER-09)** and on the overarching **Training Matrix** for the site. Staff are not permitted to carry out tasks unless they have first been trained in the procedure and this training has been signed off. All new starters receive an induction on the EMS and there is an annual toolbox talk to all staff. • Targets and performance measures are discussed in the monthly management meeting and there is an annual review of objectives and targets by management. Managers communicate with staff through one-to-ones, meetings, emails and the use of noticeboards / emails. • The **Document Control Procedure (EP-04)** forms part of the EMS. • Process control is managed in accordance with the EMS. • There will be a planned preventative maintenance (PPM) programme in place for all vehicles, plant and equipment. The Site Supervisor will be responsible for ensuring that PPM is carried out in accordance with

Appropriate Measure	Assessment of Compliance

	a schedule which is itself based on manufacturer's recommendations. There will be maintenance contracts in place for mobile plant and for major work to fixed plant e.g. conveyors / crushers. This is in addition to in-house daily checks on all plant and equipment and minor maintenance e.g. oil top up, filter change to be done in-house.
	• A **Change Control Procedure (MS341)** is in place.
	• There are site specific emergency preparedness and response procedures in place, including:
	  ○ **Environmental Incident Procedure (OP-03)**
	  ○ **Non-Conformance and Corrective Action Procedure (EP05)**
	  ○ **Fire Evacuation Procedure (MS058)**
	  ○ **Safe Plant Shutdown Procedure (not yet in place at time of writing)**
	  ○ **Spillage Procedure (OP04)**
	• Training of all staff will include compliance with environmental legislation. Compliance obligations form an integral part of the EMS; **Maintenance of Register of Applicable Legislation Procedure (EP-02)**. The relevant compliance obligations form a baseline for Objectives and Targets.

You check environmental performance and take corrective action, paying particular attention to: • monitoring and measurement • learning from incidents, near misses and mistakes, including those of other organisations	• Environmental performance will be measured and monitored through daily, weekly and annual checks including metering of water, raw material and energy use. Meter readings for energy and water will be taken and recorded monthly. • All near misses are reported and investigated leading to appropriate remedial actions; this is reported on **Near Miss Report Form (12 -**

Appropriate Measure	Assessment of Compliance
• records maintenance • independent (where practicable) internal or external auditing of the management system to confirm it has been properly implemented and maintained	**MS308)**. Environmental non-conformances including incidents and complaints are managed in accordance with the **Non-Conformance and Corrective Action Procedure (EP05)** and recorded on the **Environmental Non-conformance Report Form (8-ER05)**; this form is used to record the root cause, corrective actions and proposed long-term preventative actions. • Maintenance will be recorded in the Site Diary in addition to the specific daily check books for plant and equipment. Maintenance sheets for machinery will be in line with the manufacturer's recommendations. • There is an annual internal audit carried out – **Yearly Health, Safety and Environmental Audit Report (10 - MS157)**. This is in addition to the annual external audits on behalf of BSI.
Senior managers review the management system to check it is still suitable, adequate and effective at least annually. Improvements should be carried out within a reasonable time.	There is a **Management Review Procedure (EP-07)** in place. Management reviews are carried out annually.
You review the development of cleaner technologies and their applicability to site operations.	All of the technology selected for the operation of the site has been selected upon relevant criteria including initial and ongoing cost, suitability for purpose and also environmental performance. Going forwards the development of cleaner technologies will be reviewed company-wide and adopted where practical. In the design of the Ling Road MRF renewables have been selected where possible which includes an Air Source Heat Pump for heating and cooling offices and welfare facilities and electric car charging points. Fuel efficiency has been maximised where possible. AdBlue will be used to minimise the nitrogen oxide levels in combustion emissions from transportation vehicles.

Appropriate Measure	Assessment of Compliance
When designing new plant, you make sure that you assess the environmental impacts from the plant's operating life and eventual decommissioning. You must make sure that new plant is authorised by your environmental permit.	See above in terms of environmental impacts from operational life of site. In terms of plant decommissioning, the drainage that is being installed has been designed by such that it is readily convertible to be suitable for a standard warehouse format. The permit application which this assessment supports seeks to authorise all of the proposed processes.
In order to track and control the process of change, you must have a written procedure for proposing, considering and approving changes to procedures or infrastructure that are related to the storage or treatment of waste or pollution control.	There is a **Change Control Procedure (MS341)** in place.
You consider the risks that a changing climate poses to your operations. You have appropriate plans in place to assess and manage future risks.	Climate change was considered during the planning process particularly with respect to surface water management with the prospect of more extreme weather. Condition 12 of the approved Planning Permission states that: *Unless otherwise agreed in writing with the Local Planning Authority, the office elements of the development hereby permitted shall achieve a minimum BREEAM "Very Good" (or equivalent standard).* *Prior to first occupation of the office building, the Post-Construction Review Certificate shall be submitted to the Local Planning Authority verifying that the standards referred to in the Design Stage Certificate have been met.* BREEAM is Building Research Establishment Environmental Assessment Method.

Appropriate Measure	Assessment of Compliance
	The site is in a Flood Zone 1 which means that there is a less than 1 in 1,000 annual probability of river or sea flooding.[6] A preliminary flood risk assessment[7] was carried out as part of the planning application and climate change was considered with respect to flood risk and it was concluded that this would not significantly increase the flood risk to the existing development.
You compare your facility's performance against relevant sector guidance and standards on a regular basis, known as sectoral benchmarking.	W&S are active members of the Chartered Institution of Wastes Management, Dorset Chamber of Commerce and the British Metal Recycling Association. This allows W&S to keep up to date with relevant sector guidance and standards.
You carry out appropriate waste stream management.	Waste stream management is integrated within the EMS. There is a commitment within the **Environmental Policy (DOC-02)** to maximise the diversion of waste from landfill by segregating and recycling waste materials where economically and operationally feasible. Dorset County Council have contracted W&S to manage the Household Waste Recycling Facilities in the county. Waste Stream Management is at the core of what W&S do as a business; the waste streams are identified, quantified and resources allocated accordingly to manage the waste optimally and in accordance with the core principles within the Environmental Policy.
You have and maintain the following documentation as part of your management system: • inventory of emissions to air and water • residues management plan	See Section 3, Assessment against BAT Conclusions for Waste Treatment, BAT 3 – Inventory of Waste Water and Waste Gas. The EMS includes: • residues management plan

[6] https://flood-map-for-planning.service.gov.uk/summary?easting=403742&northing=94068 Accessed 27th January 2021
[7] Preliminary Flood Risk Assessment, JB-1340, Calcinotto, November 2012

Appropriate Measure	Assessment of Compliance
• accident management plan • site infrastructure plan • site condition report for new facilities or where you are increasing the facility's area • odour management plan, if required • noise and vibration management plan, if required • dust management plan, if required • pest management plan, if required • fire prevention plan, unless your facility does not handle combustible waste • climate change risk assessment, if required	• emergency preparedness and response procedures • site infrastructure plan • site condition report for new facilities or where you are increasing the facility's area • fire prevention plan • dust management plan The following documentation is deemed not to be required for the proposed waste types and treatments: • odour management plan – there are no biodegradable or odorous wastes proposed • noise and vibration management plan • pest management plan– there are no biodegradable or odorous wastes proposed • climate change risk assessment
Your management system must include a schedule of inspection and maintenance for all pollution control infrastructure, including for example the: • impermeable surfacing and drainage system • gas ducts of abatement systems	The site surfacing, drainage system including shut-off valves will form part of the planned preventative maintenance programme for the site. Electronic monitoring of the interceptors will be in place. There will be monthly checks on shut-off valves. Daily checks will be made on site surfacing and waste storage bays will be checked when empty; first in first out procedure to be employed where possible.
You must have a document control procedure that clearly describes how and when you will periodically review documentation and maintain version control.	The **Document Control Procedure (EP-04)** forms part of the EMS. The procedure details how version control with be maintained and that controlled documents will be reviewed at least annually by the Environmental (HSE) Manager, along with members from the Environmental Working Group. A

Appropriate Measure	Assessment of Compliance
	written record of each review is recorded on the **Document Control Amendment Sheet (ER03)**.
Your management system must clearly set out the actual physical capacity of your facility to store and handle waste, which may be less than the quantity limits allowed by your permit. You must specify limits for the maximum: • waste storage capacity at any one time • daily and annual throughputs • residence time for waste	The **Fire Prevention Plan (MS317)** [5]details the storage capacity at any one time and the residence time for all combustible wastes. There will be a Site-Specific Working Plan in place prior to operations commencing which will detail the storage capacity, daily and annual throughputs and residence times for all wastes.
When doing this, you must take into account the characteristics of your facility, the waste types and the pollution risks, for example fire and odour.	The waste storage capacity and residence times at any one time has been determined in accordance with the EA guidance on Fire Prevention Plans.[8] There will be no biodegradable waste accepted at the site and therefore the risk of odour is low.
Your limits must also reflect the constraints of the available space and processes. You must include factors like seasonal changes in supplies of inputs, and markets for outputs. Further information on determining capacity is available in our RGN 2 guidance.	The MRF has been designed to accommodate the proposed waste tonnages accounting for seasonal fluctuations. W&S have dashboards which are used to predict fluctuations on waste inputs based on 15 years' experience in the waste industry.
Staff Competence	
Your facility must be operated at all times by an adequate number of staff with appropriate training, qualifications and competence. You must keep records of training, qualifications and relevant experience.	All staff will be trained in line with their responsibilities and this training will be recorded. Refresher training will be provided in line with the frequencies dictated in the **Training Record (Environmental) (ER-09).** There are a number of Technically Competent Managers (TCMs) within W&S who are qualified to act as TCM on site. A record of Continuing competence is

[8] https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-environmental-permits Updates 11th January 2021

Appropriate Measure	Assessment of Compliance
	maintained for all TCMs. The Training Matrix is used to ensure that Continuing Competence is maintained for all TCMs. The nature of the business means that staff can be moved between sites adding to operational flexibility.
If you operate a 24-hour process, you must have: • remote or telemetric systems to make sure an alarm would be raised in the event of an incident during unmanned hours • appropriate personnel on call to deal with these incidents You must adequately explain these procedures in your management system.	There are no planning restrictions around hours of operation however, the facility will operate during daytime hours only. The site will be manned between the hours of 7am to 6pm every day except Sundays when the site will ordinarily be shut. Vehicles will enter the site from 5am onwards; operations will stop at 4pm, with the last person leaving site at around 6pm. However, there will be a thermal imaging system covering key areas within the building in addition to CCTV and radar all linked to a telemetry system designed to ensure that any incident occurring when the site is not manned is responded to in a timely manner.
The design, installation and maintenance of infrastructure, plant and equipment must be carried out by competent people.	The waste treatment equipment was designed and will be installed by specialist contractors Middleton Engineering and Macpresse.
You must have appropriately qualified managers for your waste activity who are members of a government approved technical competence scheme.	See above
Staff undertaking waste acceptance checks, including sampling and analysis of waste, must be appropriately trained and competent to • classify and characterise waste properly, • identify whether it is suitable for your facility • manage any loads that do not conform to waste acceptance criteria	There is a **Waste Acceptance and Rejection Procedure (MS340)** in place. Only staff who have been trained in this procedure will be given duties pertaining to waste acceptance checks.

Appropriate Measure	Assessment of Compliance
Accident Management Plan	
As part of your written management system you must have a plan for dealing with any incidents or accidents that could result in pollution, including near misses.	The management system includes a number of procedures for dealing with incidents and accidents including: • **Fire Evacuation Procedure – Ling Road (MS058)** • **Environmental Incident Procedure (OP-03)** • **Spillage Procedure (OP-04)** • **Near Miss Report Form (12-MS308)**
The accident management plan must identify and assess the risks the facility poses to human health and the environment. Particular areas to consider may include: • waste types • transferring substances, for example filling (including overfilling) or emptying of vessels and containers • preventing incompatible substances coming into contact with each other • failure of plant and equipment, for example over-pressure of vessels and pipework, or blocked drains • failure of containment, for example bund failure or drainage sumps overfilling • making the wrong connections in drains or other systems • failure to contain firefighting water	The risks posed to human health and the environment including those from waste types and abnormal operations are considered in the Environmental Risk Assessment.[9]

[9] Environmental Risk Assessment, Shann Pitts Consulting, June 2021

Appropriate Measure	Assessment of Compliance
• failure of abatement systems • hazardous atmospheres in confined spaces • failure of main services, for example power, steam or cooling water • checking the composition of effluents before their emission • vandalism and arson • operator error • accessibility of control equipment in emergency situations • extreme weather conditions, for example flooding or very high winds	
You must assess the risk of accidents and their possible consequences. Risk is the combination of the likelihood that a hazard will occur and the severity of the impact resulting from that hazard. Having identified the hazards, you can assess the risks by addressing six questions: • how likely is it that the accident will happen? • what may be emitted and how much? • where will the emission go - what are the pathways and receptors? • what are the consequences? • what is the overall significance of the risk? • what can you do to prevent or reduce the risk?	These questions are addressed in the Environmental Risk Assessment.[9]
The depth and type of accident risk assessment you carry out will depend on the characteristics of your facility and its location. The main factors to take into account are the:	The level of detail within the Environmental Risk Assessment[9] is proportionate to the environmental risk arising from the proposed activity at the proposed location. The risk assessment was based upon the Environment Agency generic risk assessment for a waste facility including waste treatment.

Appropriate Measure	Assessment of Compliance
• scale and nature of the accident hazard presented by the facility and its activities • risks to areas of population and the environment (the receptors)	
Through your accident management plan, you must also identify the roles and responsibilities of the staff involved in managing accidents. You must provide them with clear guidance on how to manage each accident scenario, for example, whether to use containment or dispersion to extinguish fires, or let them burn.	The emergency preparedness procedures include clear actions for staff to follow and roles and responsibilities.
You must appoint one facility employee as an emergency coordinator who will take lead responsibility for implementing the accident management plan.	The HSE Manager is responsible for ensuring that emergency procedures are in place and that appropriate training is provided. The Site Supervisor will be responsible for ensuring that the emergency procedures are enacted as required.
You must train your employees so they can perform their duties effectively and safely and know how to respond to an emergency.	The Site Manager runs quarterly drills on fire and spillage procedures for all staff on site.
You must also: • establish how you will communicate with relevant authorities, emergency services and neighbours, as appropriate, before, during and after an accident • implement emergency procedures, including for safe plant shutdown and site evacuation • implement post-accident procedures that include undertaking an assessment of the harm that may have been caused by an accident and the remediation actions you will take • consider the impact of accidents on the function and integrity of plant and equipment	In accordance with the **Environmental Incident Procedure (OP-03)** the Environmental (HSE) Manager, in collaboration with appropriate persons, is responsible for formally informing the regulatory authorities about any environmental incident classified as 'major'. All major incidents will be reported to the relevant regulatory authority in compliance with **Non-Conformance and Corrective Action Procedure (EP05)**, as soon as is reasonably practicable. Emergency procedures including the **Fire Evacuation Procedure (MS058)** and **Safe Plant Shutdown Procedure** (not yet in place at time of writing) will be enacted as required. The **Environmental Incident Procedure (OP-03)** directs that:

Appropriate Measure	Assessment of Compliance
• have contingency plans to relocate or remove waste from the facility, and suspend incoming waste • test the accident management plan by carrying out emergency drills and exercises	*An investigation into the incident and its cause will be made by the Line Manager, Site Manager and appropriate persons.* *For each recorded incident, Section 2.0 Description of the Event; Section 3.0 Corrective Actions Taken; and Section 4.0 Proposed Long-Term Preventive Actions of the Report Form will be completed by a Line Manager/Site Manager/Contracts Manager/Environmental (HSE) Manager, as appropriate.* *The completed Report Form will be returned to the Environmental (HSE) Manager within 28 days of the incident where practicable. Upon receipt the Environmental (HSE) Manager will verify that the actions have been completed (or that actions are 'in progress' where this is the case).* *Details of persistent or unresolved and repeated incidents will first be passed to the relevant representative on the Environmental Working Group and then, if necessary, to the Proprietor for action, in accordance with the provisions of this procedure.* There is a site-specific Contingency Plan is place; **Contingency Plan Ling Road MRF (MS343)**. The HSE Manager ensures that quarterly drills for fire and spillage procedures are carried out.
Following a flooding event you must inspect and assess the integrity of affected plant and equipment, in particular infrastructure that may have been in contact with floodwater or groundwater. Tank inspections may include non-destructive testing methods to verify their integrity.	The site is in a Flood Zone 1 which means that there is a less than 1 in 1,000 annual probability of river or sea flooding.[10]

[10] https://flood-map-for-planning.service.gov.uk/summary?easting=403742&northing=94068 Accessed 27th January 2021

Appropriate Measure	Assessment of Compliance
You must take the following measures, where appropriate, to prevent events that may lead to an accident. You must have appropriate procedures set out in your accident management plan.	See below
Preventing Accidental Emissions	
You must make sure that you contain the following (where appropriate) and route to the effluent system (where necessary and lawful): • process waters • site drainage waters • emergency firefighting water • chemically contaminated waters • spillages	There are no process waters produced; all waste treatment processes are dry. For areas used to store and treat waste all site drainage goes to the foul sewer under a trade effluent consent. All areas of the site where there are vehicle movements drain to the surface water sewer via an interceptor. The management of firefighting water is covered in the **Fire Prevention Plan (MS317)**[5] that accompanies this permit application. There will be sufficient capacity on site to store the maximum volume of fire water arising from a fire of the largest waste pile, in accordance with the figures provided within the guidance.[8] All chemicals will be stored inside on bunded drip trays. Spillages will be managed in accordance with the **Spillage Procedure (OP-04)**. If a spillage enters the drainage system, then it will be contained within the: • Washdown separator (foul water drainage system) • Interceptor and / or Attenuation tank (surface water drainage system)
You must have a provision to contain surges and storm water flows. You must provide enough buffer storage capacity to make sure that you can achieve this. You can define this capacity using a risk based approach, for example, by taking into account the: • nature of the pollutants	The drainage system including the surface water attenuation tank has been modelled for a peak off-site flow rate into the surface water sewer of 266.0l/s for all storms up to a peak 1:100 year +40% event as agreed with Wessex Water.[11]

[11] Proposed Drainage Layout, Drawing no 005 T2, Calcinotto, Sep 17

Appropriate Measure	Assessment of Compliance
• effects of downstream waste water treatment • sensitivity of the receiving environment	
You can only discharge waste water from this buffer storage after you have taken appropriate measures, for example, to control, treat or re use the water. You must make sure your permit authorises you to discharge waste water from your site into the environment.	Water passes through a separator before the attenuation tank. The discharge of surface water to the public surface water sewer and the discharge of dirty water to the public foul sewer will be made in accordance with Section 106 agreements made between the operator and Wessex Water.
You must implement spill contingency procedures to minimise the risk of an accidental spill entering watercourses or sewers or contaminating land.	Spillages will be managed in accordance with the **Spillage Procedure (OP-04)** which forms part of the EMS.
You must take account of additional firefighting water flows or firefighting foams, in accordance with our fire prevention guidance. You may need infrastructure like emergency storage lagoons to prevent contaminated firefighting water from reaching a receiving water body.	The management of firefighting water is covered in the **Fire Prevention Plan (MS317)** that accompanies this permit application.[5]
You must consider and, if appropriate, plan for the possibility that you may need to contain or abate accidental emissions from: • overflows • vents • safety relief valves • bursting discs and seals • tank wall penetrations If this is not advisable on safety grounds, you must focus attention on reducing the probability of the emission.	There are no overflows, vents, safety relief valves, bursting discs or tanks from which there may be accidental emissions. This item is not applicable to the proposed operation.
Security measures	

Appropriate Measure	Assessment of Compliance
You must have security measures (including staff) to prevent unauthorised access to your facility, thereby preventing: • harm or injury • damage to equipment • theft • illicit dumping and fly-tipping • arson	Security measures will be in place at the site to prevent arson/ vandalism include: • The site will be manned between the hours of 7am to 6pm every day except Sundays when the site will ordinarily be shut. Vehicles will enter the site from 5am onwards; operations will stop at 4pm, with the last person leaving site at around 6pm. There are no restrictions upon operating hours within the site planning permission. • The site will be surrounded by a 6ft anti-climb fence. The site entrance will have gates which will be locked out of hours. During operational hours the entrance will be manned via the weighbridge staff. • All buildings will be locked at the end of the working day. All vehicle entrances and exits will benefit from shutter doors. • The areas external to the MRF building will be floodlit during hours of darkness. The whole site will benefit from CCTV and additionally the areas outside the building will benefit from radar intruder detection. • There will a thermal imaging fire detection system inside the building and smoke detection systems in the offices and electrical control rooms. • There will be a contract with a security firm who will be contacted if the thermal imaging system, smoke detection system, CCTV or radar are triggered out of hours. In addition, the fire and rescue service will be automatically notified if the thermal imaging or smoke detection systems alarm and this alarm is not closed down within a set time frame that can be set by the operator; currently this is proposed to be 4 minutes.

Appropriate Measure	Assessment of Compliance
	• Site security measures will be checked daily as part of the site Environmental Management System and any repairs made as soon as practicably possible. This will be recorded in the **Daily Site Inspection Sheet (ER-07)**.
Facilities must use an appropriate combination of the following measures: • security guards • total enclosure (usually with fences) • controlled entry points • lighting • warning signs • 24 hour surveillance, such as CCTV	See above
Fire prevention	
If your permit allows you to store or treat combustible waste, you must have a fire prevention plan that meets the requirements of our guidance.	The **Fire Prevention Plan (MS317)** accompanies this permit application.[5]
Other accident prevention measures	
You must maintain plant control in an emergency using one or a combination of the following measures: • alarms • trips and interlocks • automatic systems based on microprocessor control and valve control • tank level readings such as ultrasonic gauges, high level warnings, process interlocks and process parameters	If an alarm sounds on site, then an emergency stop circuit which stops all equipment will be activated via input / output interfaces. There will be personnel monitoring for hazardous plant such that if personnel enter these areas an alarm will sound, and the plant will shut down.

Appropriate Measure	Assessment of Compliance
You must: • make sure that all the measurement and control devices you would need in an emergency are easy to access and operate in an emergency situation • maintain plant in a good state through a preventive maintenance programme and a control and testing programme • use techniques such as suitable barriers to prevent moving vehicles damaging equipment • implement procedures to avoid incidents due to poor communication between operating staff - during shift changes and following maintenance or other engineering work • where relevant, use equipment and protective systems designed for use in potentially explosive atmospheres	As above. The whole site or individual fixed plant can be isolated from the main switch room which is to the west of the main building and can be accessed without entering the main building. All plant, equipment and vehicles will be subject to a planned preventative inspection and maintenance programme. Storage of hazardous materials will be in dedicated areas away from risk of vehicle impact. There will be management handovers between shift changes, Site Diary and the Microsoft Teams application including the group chat function will also be used for this purpose. Due to the nature of the proposed permitted activities, there will be no potentially explosive atmospheres.
Record keeping and procedures	
You must: • keep an up-to-date record of all accidents, incidents, near misses, changes to procedures, abnormal events, and the findings of maintenance inspections • carry out investigations into accidents, incidents, near misses and abnormal events and record the steps taken to prevent their reoccurrence • maintain an inventory of substances which are present (or likely to be) and which could have environmental consequences if they escape	• Environmental incidents are managed in accordance with the **Environmental Incident Procedure (OP-03)** and recorded on **Environmental Non-Conformance/ Incident/ Complaint Report Form (ER05)**. The **Environmental Incident Procedure (OP-03)** includes the roles and responsibilities with respect to incident investigation to prevent a reoccurrence. • Abnormal events including incidents, non-conformance and complaints are all recorded using **Environmental Non-Conformance / Incident / Complaint Report Form (ER-05).**

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	• Health and safety accidents are recorded in the **Accident Book (MS085/79)** and investigated and recorded on **Incident / Accident Investigation Report (MS087)**. • All near misses are reported and investigated leading to appropriate remedial actions; this is reported on **Near Miss Report Form (12 - MS308)**. • Changes to procedures are recorded in accordance with the **Document Control Procedure (EP-04)** and written record of each review is recorded on the **Document Control Amendment Sheet (ER03).** • The findings of maintenance inspections will be recorded in the Site Diary in addition to the specific daily check books for plant and equipment and log books for specific items of equipment. Maintenance frequencies for machinery will be in line with the manufacturer's recommendations. • There is an inventory of substances for the site - **Site Stock Register - Raw Materials - Ling Road MRF (MS035)**.
You should notify the Environment Agency without delay if you detect any of the following events and they are causing, or may cause, significant pollution: • a malfunction • a breakdown or failure • an accident • emission of a substance not controlled by an emissions limit • breach of an emissions limit	In accordance with any environmental permit for the site, it can be confirmed that the Environment Agency will be notified in any of these circumstances. Relevant notification will be carried out in accordance with the **Non-Conformance and Corrective Action Procedure (EP-05)** and is the responsibility of the Environmental (HSE) Manager. It is deemed unlikely that the issued permit will have any emission limits as there are no emissions to air or land and emissions to water and sewer will be controlled under Section 106 agreements with Wessex Water. However, the permit contains emission limits then any exceedances will be notified to the Environment Agency without delay.

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Contingency plan and procedures	
You must implement a contingency plan which makes sure that you: • comply with all of your permit conditions and operating procedures during maintenance or shutdown at your facility, including disruption at other facilities affecting supplies to your facility, or removing waste from it • do not exceed limits in your permit and you continue to apply appropriate measures for storing and handling waste • stop accepting waste unless you have a clearly defined method of recovery or disposal and enough permitted capacity	The **Contingency Plan Ling Road MRF (MS343)** ensures that W&S will be able to: • comply with permit conditions and operating procedures during maintenance or shutdown; • comply with limits in the environmental permit and continue to apply appropriate measures for storing and handling waste. As stated in the contingency plan, ultimately in the event that there is a risk that waste storage capacity of any waste stream would be exceeded or the treatment capacity is compromised, waste acceptance of relevant waste stream(s) would be stopped.
You must have contingency procedures to make sure that, as far as possible, you know in advance about any planned shutdowns at waste management facilities to which you send waste.	The Operations Manager will be responsible for maintaining regular communications with waste facilities where outputs are sent to be aware, as far as possible, about any planned shutdowns.
You must make your customers aware of your contingency plan, and of the circumstances in which you would stop accepting waste from them.	The portal IT system allows W&S to communicate directly with their clients.
You must consider whether the sites or companies you rely on in your contingency plan: • can take waste at short notice • are authorised to do so in the quantities and types likely to be needed, in addition to carrying out their existing activities	W&S operate a number of waste sites throughout Dorset and Oxfordshire. In the event the site was partially or fully closed due to maintenance there is capacity to store waste at other locations at short notice. The Kennington Road permitted site (EPR/RP3497HC) can store excess waste for onward processing. This site is located approximately three miles from the Ling Road facility.
You must not discount alternative disposal or recovery options on the basis of extra cost or geographical distance if doing so means you could exceed your permitted limits or compromise your storage or handling procedures.	Permit compliance would not be compromised based on costs and all necessary measures will be taken to ensure that volumes of waste are

Appropriate Measure	Assessment of Compliance
	effectively managed at all times even if it meant transporting waste to sites further away.
You must not include unauthorised capacity in your contingency plan. If your contingency plan includes using temporary storage for additional waste at your facility, then you must make sure that your facility is authorised for this storage and you have the appropriate infrastructure in place.	Unauthorised capacity is not detailed in the Contingency Plan.
Contingency measures for treatment only	
Your management procedures and contingency plan must: • identify your technology's known or predictable malfunctions and the procedures, spare parts, tools and expertise needed to deal with them - so you can minimise predictable malfunctions and fix them quickly • include a record of spare parts held, especially critical spares, or state where you can get them from and how long it would take • have a defined procedure to identify, review and prioritise items of plant which need a preventative regime • include all equipment or plant whose failure could directly or indirectly lead to an impact on the environment or human health • identify non-productive or redundant items such as tanks, pipework, retaining walls, bunds, reusable waste containers, ducts, filters and security systems and implement a programme of decommissioning and removal • make sure you have the spare parts, tools, and competent staff needed before you start maintenance	Equipment is kept on site for minor repairs and maintenance e.g. oil to-ups, changing oil filters or bearings. Larger spares are not usually kept on site as all of the key pieces of machinery for operations will be under a maintenance contract with engineer call out as required. All plant, machinery and vehicles are subject to the planned preventative maintenance programme. Non-productive or redundant items will be identified and decommissioned in line with the **W&S Overarching Decommissioning Plan**.

Appropriate Measure	Assessment of Compliance
If you produce an end-of-waste material, your contingency planning must consider storage capacity for end-of-waste products, and materials that fail the end-of-waste specification.	There are no end-of-waste materials produced; all segregated waste materials will be dispatched for recovery off-site as wastes.
Your management system must include procedures for auditing your performance against all of these contingency measures and for reporting the audit results to the site manager.	There is an annual internal audit carried out – **Yearly Health, Safety and Environmental Audit Report (10 - MS157)**. The internal audit includes checks on maintenance of measuring equipment and maintenance records.
Facility decommissioning	
You must consider the decommissioning of the facility at the design stage and make suitable plans to minimise risks during decommissioning.	In accordance with the W&S Overarching Decommissioning Plan: *When a new recycling facility is being designed, it is the responsibility of the General Manager / Business Development Executive to ensure that the environmental impact of decommissioning is taken into account in facility design and infrastructure selection; for example sub-surface infrastructure such as storage tanks must be avoided where possible.*
For existing facilities where potential risks are identified, you must implement a programme of design improvements. These design improvements must make sure that you: • avoid using subsurface tanks and pipework • drain and clean out vessels and pipework before dismantling • use insulation which you can remove easily without dust or hazard • use recyclable materials, taking into account operational or other environmental objectives	Not applicable
You must maintain a decommissioning plan to demonstrate that: • plant can be decommissioned without causing pollution • the site will be returned to a satisfactory condition	**W&S Overarching Decommissioning Plan** in place.

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You should follow our guidance on how land and groundwater should be protected at permitted facilities. You should plan for producing a site condition report, if needed to surrender your permit.	An application Site Condition Report supports this permit application.[12] This Site Condition Report will be updated thorough out the operational life of the site and again at permit surrender. The Site Condition Report draws upon detailed information pertaining to the current condition of the land and groundwater. The site design with appropriate inspection and maintenance will prevent any degradation of land or groundwater quality. The records of any incidents with the potential to cause pollution of the land or groundwater will be kept until permit surrender.
Waste pre-acceptance, acceptance and tracking	
Waste pre-acceptance	
You must implement waste pre-acceptance procedures so that you know enough about a waste (including its composition) before it arrives at your facility. You need to do this to assess and confirm that the waste is technically and legally suitable for your facility. If you accept the waste, you must keep records to justify your decision. Your pre-acceptance procedures must follow a risk-based approach, considering: • the source and nature of the waste • potential risks to process safety, occupational safety and the environment (for example from odour and other emissions) • knowledge about the previous waste holder(s)	The majority of the waste received (bulky waste) is brought into site from household waste recycling (HWR) sites operated by W&S. The quality of the waste is managed at the HWR sites through signage, staffing and checks made as waste is tipped into containers by members of the public. Any non-permitted waste put into the bulky waste containers at the HWR site will be pulled out, separated and sent on for appropriate recovery or disposal. Trade waste will be booked into site and only accepted from account holders. During the booking in process the waste types will be clarified with the waste producer and exclusions will be stipulated at this point.
When you receive a customer query, and before the waste arrives at your facility, you must obtain enough information from the waste producer to satisfy yourself that the waste has been properly assessed and classified in	In the case of bulky waste, the waste types are controlled at source via checks at the Household Waste Recycling Sites; the waste is understood.

[12] Site Condition Report, Shann Pitts Consulting, May 2021

Appropriate Measure	Assessment of Compliance
accordance with WM3. (This does not apply if the waste comes from an occupier of a domestic property and is waste produced on that property.) As a minimum, you must get the following information in writing or electronic form: • details of the waste producer including their organisation name, address and contact details • a description of the waste • the waste's List of Wastes Regulations code (European Waste Classification code) • the source of the waste (the process that gives rise to the waste) • information on the nature and variability of the waste production process • information about the history of the donor site if it may be relevant to the classification of the waste (for example soils and other construction and demolition arisings from a site contaminated by previous industrial uses) • the waste's physical form • the waste's composition (based on representative samples if necessary) • a description of the waste's odour • the waste's age, that is when it first became waste • the type of packaging • whether the waste is mixed or segregated by List of Wastes code	In the case of trade waste, the Trade Waste Manager will obtain the following information from the waste producer (only account holders can book waste in) before the waste is booked in: • details of the waste producer including their organisation name, address and contact details • a description of the waste • the waste's List of Wastes Regulations code (European Waste Classification code) • the source of the waste (the process that gives rise to the waste) • information on the nature and variability of the waste production process • information about the history of the donor site if it may be relevant to the classification of the waste (for example soils and other construction and demolition arisings from a site contaminated by previous industrial uses) • the waste's physical form • the waste's composition (based on representative samples if necessary) • a description of the waste's odour • the waste's age, that is when it first became waste • the type of packaging • whether the waste is mixed or segregated by List of Wastes code

Appropriate Measure	Assessment of Compliance
• an estimate of the quantity you expect to receive in each load and in a year	• an estimate of the quantity you expect to receive in each load and in a year If there are customer queries about the potential acceptance of trade waste which falls under a mirror entry waste code, then the waste will only be accepted if there is sufficient information from the waste producer that the waste is non-hazardous.
For mirror entry List of Wastes codes, you must also get the following (unless the waste comes from the occupier of a domestic property and is waste produced on that property) in writing or electronic form: • information about the pollutants that could be present • an assessment of the waste's hazardous properties (this may involve sampling and analyses or, in some cases, a safety data sheet) • where sampling has been used, there must be evidence to demonstrate that the samples are representative of the waste (this should be set out in a sampling plan) • an assessment of the sampling results to determine whether the waste has hazardous properties • confirmation of the correct List of Wastes code, based on the assessment	The vast majority of waste is from Dorset Household Waste Recycling Sites. No trade waste with a mirror entry List of Waste code will be accepted on site unless the relevant information, as listed, has been obtained from the waste producer. The Trade Waste Manager will be responsible for ensuring that waste with a mirror entry code is only accepted if it can be determined that the waste is non-hazardous in accordance with WM3.
You may decide to accept a customer's mirror entry waste without sample information if the origin of the waste is reliably understood and it clearly demonstrates that the waste is non-hazardous. However, just a visual assessment will not be enough to assess whether mirror entry waste is hazardous or not.	Visual assessments of waste with a mirror entry waste code will not be relied upon.

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If the waste is a mirror entry and has not been properly assessed, you must assume it is the hazardous entry as a precautionary measure. This is likely to mean that you cannot accept it at your facility. You should verify the pre-acceptance information by contacting or visiting the producer. Dealing with staff directly involved in waste production can help to fully characterise a waste.	Any waste with a mirror entry code for which a full assessment has not been carried out will not be accepted.
Analysis of pre-acceptance samples must be carried out by laboratories who are UKAS or MCERT accredited for the prescribed test	Pre-acceptance waste sampling will be carried out by laboratories who are UKAS or MCERT accredited for the prescribed test.
After a waste has been properly assessed and classified, you must technically assess the waste's suitability for storage or treatment at your facility to make sure you can meet your permit conditions. You must make sure that the waste complies with your facility's treatment capabilities and you are permitted to take that waste.	All waste will be assessed in accordance with the waste transfer note (permitted waste codes) and visually at the waste acceptance stage. Waste will only be accepted if there is sufficient storage and treatment capacity for its acceptance onto site. There are contingency measures in place, in accordance with the **Contingency Plan Ling Road MRF (MS343)**.
You must keep pre-acceptance records for at least 3 years, in a computerised waste tracking system, following receipt of the waste. If an enquiry does not lead to receipt of the waste, you do not need to keep records.	All pre-acceptance records will be kept for at least three years.
You must reassess the information required at pre acceptance if the: • waste changes • process giving rise to the waste changes • waste received does not to conform to the pre acceptance information In all cases you must reassess the information required at pre-acceptance on an annual basis.	Reassessment of waste streams and their suitability will be carried out if the waste changes, the process giving rise to the waste changes or the waste does not conform to the pre-acceptance information. As a minimum, all waste pre-acceptance criteria will be reviewed on an annual basis.
When you agree that you will accept waste from a customer, you should decide and record what parameters you will check at the acceptance stage. The checks could be visual, physical, chemical and odour-based parameters.	Criteria for waste acceptance and rejection are set out within the **Waste Acceptance and Rejection Criteria (MS340).**

Appropriate Measure	Assessment of Compliance
You must also record the criteria for non-conformance or rejection. The person checking the waste for acceptance can also decide on their own additional parameters.	
Waste Acceptance	
You must implement waste acceptance procedures to check that the characteristics of the waste received matches the information you obtained during waste pre-acceptance. This is to confirm the waste is as expected and that you can accept it. If the waste does not conform to the pre-acceptance information, you may still be able to accept the waste, but you must confirm first that your permit allows it and that your facility can handle it appropriately. Otherwise, you must reject the waste.	There will be several stages of waste acceptance checks: 1. Checks at weighbridge - Waste will be rejected if it is not booked in (only account holders can book in waste) or is not accompanied by the correct paperwork and carried by a registered waste carrier. 2. Trade waste will be visually checked at the weighbridge i.e., containers unsheeted, vans opened etc. Any load containing non-permitted items will be turned away from site. 3. Trade waste will be tipped in front of the bays so that a further visual check can be carried out while the vehicle is still on site. If non-permitted items are identified, then the load will be reloaded and rejected. 4. The bulky waste and other separate waste streams are checked as the waste is tipped in the bay. 5. For any mixed waste loads (the majority of waste), a further thorough check is made by operatives on the manual picking line who are trained to identify and separate non-permitted items. Waste may be rejected at any of these points if non-permitted waste is identified including: • Food waste • Liquid, powder or sludge

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	• Hazardous waste other than WEEE, fridges, batteries, paints, inks, resins and adhesives • Explosive materials • Radioactive materials • Infectious materials • Animal waste (blood, faeces etc.) This is detailed in the **Waste Acceptance and Rejection Procedure (MS340)**.
Your procedures should follow a risk-based approach, considering: • the source, nature and age of the waste • potential risks to process safety, occupational safety and the environment (for example, from odour and other emissions) • the potential for self-heating • knowledge about the previous waste holder(s)	The **Waste Acceptance and Rejection Procedure** follows a risk-based approach. For example, extra checks are made on trade waste at the weighbridge as this waste has not been checked at source.
You must only receive pre-booked wastes onto site that have been adequately pre-accepted and that are consistent with the pre-acceptance information. This does not apply in an emergency (for example, taking waste resulting from an emergency incident clean-up) or to household waste recycling facilities.	All waste that will be received at the site has been booked in to ensure that only appropriate waste is accepted onto site when there is sufficient storage (including the quarantine area) and treatment capacity.
When deciding whether to accept waste, you must also check that the relevant storage areas (quarantine, reception and general) and treatment processes in your facility have the physical capacity needed to handle the waste. You must not accept waste if this capacity is not available, or if you would breach your permit by doing so.	As above. Waste tonnages are tracked via the weighbridge computer which is linked to the Waste Logic tracking system so it can be ensured that the permitted annual tonnages and maximum storage capacities are not exceeded. The tonnages of each waste type, either pre or post treatment is tracked through the use of daily observations and recordings. Waste tonnages of each waste stream can therefore be tracked at all times. All daily observations will be recorded in the **Daily Site Inspection Sheet (ER-07)**.

Appropriate Measure	Assessment of Compliance
You must visually check wastes and verify them against pre acceptance information and transfer documentation before you accept them on site. The extent of the initial visual check is determined by the waste type and how it is packaged.	Waste from the Household Waste Recycling Sites operated by W&S has already been checked so is taken into site and tipped in the relevant bay or the container stored as appropriate. Trade waste is only accepted from account holders. All loads of trade waste are uncovered at the weighbridge and vans opened to check if the waste is acceptable. Loads containing non-permitted materials are rejected at the weighbridge. The load is also checked against the details provided in the waste transfer documentation. Once the trade waste is brought into the building it is not tipped directly into a bay but in front of the bay so that it can be checked and reloaded if needed. In addition, all mixed waste is visually inspected on the manual picking line for the presence of any non-permitted items such as paint tins, WEEE, batteries etc.
You must check and validate all transfer documentation and resolve discrepancies before you accept the waste. If you believe the incoming waste classification or description is incorrect or incomplete, then you must address this with the original waste producer during waste acceptance. You must record any non-conformance. If you have assessed the waste as acceptable for on-site storage or treatment, you must document this.	The majority of waste entering the site is coming from HWRS operated by W&S and will be covered under an annual waste transfer ticket. Trade waste from other sources will only be accepted if pre-booked and accompanied by the correct waste transfer documentation. This paperwork with be checked at the weighbridge and the waste will not be accepted onto site unless any discrepancies of other paperwork issues can be resolved. Non-conformance with the paperwork will be recorded on **Environmental Non-Conformance Report Form (ER-05)**. All waste rejection will be recorded **Environmental Non-Conformance Report Form (ER-05)**.
You must have clear criteria that you use to identify non-conforming wastes and wastes to be rejected. You must also have written procedures for	The **Waste Acceptance and Rejection Procedure (MS340)** details clear criteria for waste rejection as detailed above.

Appropriate Measure	Assessment of Compliance
recording, reporting and tracking non-conforming and rejected wastes. These must include: • using quarantine storage • notifying the relevant customer or waste producer • recording a summary of your justification for accepting non-conforming waste in your computerised waste tracking system You must take measures to prevent recurrence.	As detailed in the procedure, all waste rejection must be recorded on the **Environmental Non-Conformance Report Form (ER-05)** by the Weighbridge Operative which requires assessment of the root cause and corrective actions to prevent a recurrence. The Weighbridge Operative is responsible for passing the completed **Environmental Non-Conformance Report Form** to the consignor of the waste to make them aware that the waste has been rejected. The Compliance Officer is responsible for identifying the root cause of the incident and competing the relevant sections of the **Environmental Non-Conformance Report Form.** The **Waste Acceptance and Rejection Procedure** details the use of the quarantine area for non-permitted wastes that were not identified before the delivery vehicle left site. Non-permitted wastes will not be knowingly accepted.
Where you reject hazardous waste, you must follow the requirements of the Hazardous Waste (England and Wales) Regulations 2005.	Any hazardous waste inadvertently accepted into site will be managed in accordance with the Hazardous Waste Regulations and removed from site as soon as practicably possible.
You must weigh each load of waste on arrival to confirm the quantities against the accompanying paperwork, unless alternative reliable and representative systems are available (for example, based upon density and volume). You must record the weight in your computerised waste tracking system, so you can monitor available capacity at your facility.	All loads will be recorded on the weighbridge and this data linked to the current site capacity via the waste tracking system.
The person carrying out waste acceptance checks must be trained to effectively identify and manage any non-conformances in the loads received, so you comply with your Duty of Care for waste and your permit conditions.	All staff who carry out waste acceptance checks will be trained in the procedure before carrying out waste acceptance, inspection and rejection tasks.

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Your procedures must make sure that your staff watch waste being unloaded from tipper lorries, so you can quarantine the waste if necessary before it is mixed with other material.	The **Waste Acceptance and Rejection Procedure (MS340)** details the visual check made of waste loads as they are discharged and actions that will be taken if non-permitted waste is identified during tipping i.e., separation, quarantine and timely removal off-site to suitably permitted site.
Offloading, reception and quarantine areas must have an impermeable surface with self-contained drainage, to prevent any potentially polluting liquid from escaping off site. This requirement does not apply if your facility's permit allows only inert wastes and does not require impermeable surfacing with self-contained drainage.	All areas of the site used for waste storage, handling and treatment including the waste quarantine area (a container within the building) will benefit from a concrete impermeable surface with sealed drainage (foul sewer connection).
Quarantine	
Your facility must have a dedicated waste quarantine area which you use to temporarily store waste being rejected, or non-conforming waste whilst it is being assessed.	There will be a dedicated sealed 35-yard container for rejected waste. This will benefit from signage and will be located inside the building.
Quarantine storage must be separate from all other storage and clearly marked as a quarantine area.	As above for Waste Acceptance.
You should store the waste in quarantine in closed containers or cover it to prevent emissions if appropriate. For example, you should sheet quarantined soil or store it in a covered skip to prevent rainfall or wind from mobilising pollutants.	As above for Waste Acceptance.
You must have written procedures for dealing with wastes held in quarantine, including a maximum storage volume. Quarantine storage must not exceed five working days. Your procedures should make sure you remove quarantined waste from your facility in less than five working days if it is causing (or poses a risk of causing) significant pollution off-site.	The procedure for dealing with waste in the quarantine area is detailed in the **Waste Acceptance and Rejection Procedure (MS340)**. The maximum storage volume to be held in the waste quarantine container is 26.9m^3 and the maximum storage time for any waste that is causing (or poses a risk of causing) significant pollution off-site is five working days.
Waste sampling and analysis	

Appropriate Measure	Assessment of Compliance
You may need to take samples of waste to assess and classify it against the pre-acceptance information and your waste acceptance procedures. For example, if you accepted waste in an emergency or waste which you now suspect is inconsistent with pre-acceptance information. You may also need to sample waste to inform decisions about appropriate treatments, or to test the specification of outputs.	It is not proposed to accept waste which require in-house waste sampling. All waste sampling that is required will be carried out by the waste producer. If this analysis is not deemed to meet the requirements of BAT or shows that the waste may be hazardous then the waste will not be accepted.
If you take samples, they must be representative. A representative sample is one that takes account of the full variation and any partitioning of the waste so you can account for worst case scenarios.	As above
Before sampling waste, you must have sampling procedures. When developing your procedures, you should consider EN 14899 Characterization of waste - Sampling of waste materials - Framework for the preparation and application of a Sampling Plan. Your sampling procedures must: produce representative samples for analysis • enable decisions about waste acceptance and treatment • be risk-based, depending on the type of waste, knowledge of the waste producer and their process, and possibilities for treatment	As above
You must customise your sampling procedures for: • bulk liquid • bulk solids • large and small containers or vessels (the number of samples increases with the number of containers or vessels and the variability of the waste)	Liquid waste will not be accepted. As above for bulk solids.
In the case of containerised liquids, you must obtain a representative sample by taking a core sample down to the base of the container. You must make	Liquid waste will not be accepted.

Appropriate Measure	Assessment of Compliance
sure that you replace lids, bungs and valves immediately after sampling. You can make a composite sample of liquid from multiple containers if each container holds the same waste and you know the waste is not variable.	
You must determine and record the following information in your computerised waste tracking system: • the sampling regime for each load, together with your justification for selecting each option • a suitable location for the sampling points • the capacity of the sampled vessel (for samples from containers, an additional parameter would be the total number of containers) • the number of samples and degree of consolidation • the operating conditions at the time of sampling	It is not proposed to accept waste which require in-house waste sampling. All waste sampling that is required will be carried out by the waste producer. If this analysis is not deemed to meet the requirements of BAT or shows that the waste may be hazardous then the waste will not be accepted.
If you decide not to sample waste subject to a mirror entry hazardous waste code, you must record your justification in your computerised waste tracking system.	As above
You must have waste samples tested against the parameters decided at pre-acceptance. You must record the results of the tests in your computerised waste tracking system. You must note and investigate any discrepancies.	As above
Sample analysis must be carried out by laboratories who are UKAS or MCERT accredited for the prescribed test.	As above
Waste tracking	
You must use a computerised waste tracking system to hold up-to-date information about the available capacity of different parts of your facility, for example reception, quarantine, treatment and bulk storage. You must use a	All waste in and out of the site is logged and recorded via the weighbridge computer. This data is fed live into the waste tracking system (Waste Logics) which can be interrogated to ascertain available capacity for waste reception

Appropriate Measure	Assessment of Compliance
pre-booking system to make sure that you have enough waste storage and process capacity for the incoming acceptable waste.	and storage both pending treatment and pending dispatch off-site. Waste on site at the various stages i.e., pre-treatment and post treatment for each waste stream are estimated through daily checks. Waste Logics will be linked to the waste booking system and the weighbridge computer to give live data on what is on site and what is booked in to arrive.
Your computerised waste tracking system must hold all the information generated during: • pre acceptance • acceptance • non-conformance or rejection • storage • repackaging • treatment • removal off site This information must be readily accessible.	As above The Site Supervisor, Technically Competent Manager and other management staff will have access to the Waste Logics and on-site checks to ensure that this information is used to inform daily decision making and planning.
You must create records and update them to reflect deliveries, on-site treatment and despatches. Your tracking system will also operate as a waste inventory and stock control system, including both wastes and end-of-waste materials produced at your facility. It must include this information as a minimum: • the date the waste arrived on site • the original producer's details (or unique identifier) • a unique reference number	The waste tracking system will include all of the required information detailed in this appropriate measure.

Appropriate Measure	Assessment of Compliance
• waste pre acceptance and acceptance information • the package type and size • the intended treatment or disposal route • the nature and quantity of wastes held on site • where the waste is physically located on site • where the waste is in the designated recovery or disposal process • identifying the staff who have taken any decisions about accepting or rejecting waste streams and who have decided on recovery or disposal options • details that link waste to relevant transfer notes • details of any non-conformances and rejections, including consignment notes for waste rejected because it is hazardous	
The computerised waste tracking system must be able to report for each of List of Wastes code: • the total quantity of waste present on site at any one time • a breakdown of the waste quantities you are storing pending on-site treatment or awaiting onward transfer • where a batch of waste is located based on a site plan • the quantity of waste on site compared with the limits in your management system and permit • the length of time the waste has been on site compared with the limits in your management system and permit	The waste tracking system will use List of Wastes code as per the codes that the untreated waste is accepted under and then the codes that best describe the resulting segregated waste streams. All of the information listed under this appropriate measure will be available the use of the waste tracking system.

Appropriate Measure	Assessment of Compliance
The computerised waste tracking system must also be able to report the total quantity of end-of-waste materials on site at any one time, and where that material is located based on the site plan.	There will be no end of waste materials produced.
You must store back-up copies of these computer records off site. These records must be readily accessible in an emergency.	All records relating to waste tracking will be maintained electronically in the W&S cloud-based systems.
You must keep acceptance records for a minimum of 2 years after you have treated the waste or removed it off site. You may have to keep records for longer if they are required for other purposes, for example hazardous waste consignment notes.	All waste transfer notes and any associated documentation will be kept for a minimum of five years. Hazardous waste consignment notes will be kept for a minimum of five years.
Waste storage	
You must have waste storage and handling procedures. You must store and handle waste in a way that makes sure you prevent and minimise pollution risks by using appropriate measures.	The majority of waste will be stored inside the building. Storage of waste outside will be limited to: • Hardcore, plasterboard and glass in four dedicated bays; • Metal in sealed containers; and • Hard plastic and soft plastic bales. The risks from the storage of these wastes outside is mitigated by the selection of these materials over waste types that may generate litter, dust or odour. All waste is stored on an impermeable surface with sealed drainage thus mitigating the pollution risk to land and water. There is a risk of dust arising from the storage of hardcore is controlled through the use of water misting sprays over the bays. All waste will be treated inside the building.
You must store waste in locations that minimise the unnecessary handling of waste. Waste handling must be carried out by competent staff using	The facility has been designed to ensure a flow of materials through the building with minimal handling. All waste treatment is mechanical apart from

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appropriate equipment. You must use mechanical unloading technologies where it is possible, safe and practicable to do so.	the picking line which is necessarily manual. Waste handling is only carried out by trained staff who are competent in the relevant procedures.
Where possible, you should locate storage areas away from watercourses and sensitive perimeters, for example those close to public rights of way, housing or schools. You must store all waste within the security protected area of your facility to prevent unauthorised access and vandalism.	The site is in a built-up area and as such there are human receptors in close proximity to all of the site boundaries. However, all of the operations likely to create fugitive emissions that may impact upon receptors will be carried out within the building. The waste streams which will be stored outside are listed above. Site security measures are in place for the whole facility as previously detailed under Accident Management Plan, Security Measures.
You must clearly document in your management system the maximum storage capacity of your facility and its designated storage areas. You must regularly monitor the quantity of stored waste against the allowed maximum capacities, and not exceed them. You must define capacity in terms of, for example: • maximum tank or vessel capacities • cubic metres or tonnage • numbers of skips or other containers	The **Fire Prevention Plan (MS317)** details the storage capacity at any one time and the residence time for all combustible wastes. There will be a Site-Specific Working Plan in place prior to operations commencing which will detail the storage capacity, daily and annual throughputs and residence times for all wastes. Waste tonnages will be tracked by the computerised waste tracking system and quantities verified through daily inspections; **Daily Site Inspection Sheet (ER-07)**.
You should clearly mark all waste storage areas and provide signs indicating the type of waste stored there.	Signage will be provided for all waste storage areas.
You must not accumulate wastes. You must treat wastes or remove them from the site as soon as possible. You must prioritise the treatment or off-site transfer of waste based on: • its type • its age on arrival • the date of arrival • the duration of storage on site	Maximum storage times for all waste streams are defined; all waste will be dealt with on a first-in-first-out basis i.e., in accordance with the date of its arrival on site and the duration of storage on site. There will be no biodegradable waste accepted and therefore the age of the waste on arrival will not be a factor in prioritising waste for treatment.

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Except for inert waste, you must follow the first-in-first-out principle, unless you need to prioritise more recently received wastes because they pose a higher risk of pollution.	As above
You must thoroughly clean storage bays and containers used for non-inert waste on a regular basis to prevent the build-up of aging waste, which will be a source of odour and attract vermin.	The waste storage bays will be cleaned out every time they are empty. The bulky waste will be stored in two bays to allow the first-in first-out principle to be applied. This will also allow the regular cleaning out of the bays. There will also be a redundant bay for contingency which could be used to move waste into whilst deep cleaning is carried out.
All waste containers must be fit for purpose, that is: • in sound condition • not corroded, if metal • have well-fitting lids • suitable for the contents	Any containers used for waste storage will be in sound condition and suitable for contents. It is not proposed to cover any of the containers in-situ as all of the waste containers will be stored inside the building with the exception of containers holding metal which may be stored outside in the yard. Containers holding light waste will be covered during transportation as required to prevent windblown litter.
You must inspect storage areas, containers and infrastructure regularly to make sure there is no loss of containment. You must deal with any issues immediately. You must keep written records of the inspections. You must rectify and log any spillages of waste.	All waste storage areas will be inspected daily; **Daily Site Inspection Sheet (ER-07)** to ensure that waste storage is within maximum limits as specified in the Site-Specific Working Plan and **Fire Prevention Plan (MS317)** and that there is no loss of containment. Any waste not within its designated storage area will be moved back to its storage area as soon as practicably possible. This will be recorded in the Site Diary.
You must not carry out activities that represent a fire risk within any waste storage area. Examples of these activities include: • grinding • welding or brazing of metalwork • smoking	In the case of hot works such as welding and cutting being required on-site, then all appropriately trained staff and contractors will be required to obtain and follow a Hot Works Permit. All hot works must be risk assessed and permitted before commencement of work. The system will consider the location of the hot works in relation to combustible material and the risk management required e.g., moving plant/

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• parking of mobile plant and normal road vehicles except while unloading • recharging forklift truck and other mobile plant batteries	machinery for repair or moving combustible material away from the hot works area. No naked flames (sources of ignition) will be used within 6m of combustible or flammable material. For any hot work in areas where wastes or other combustible materials are present, a 6m separation distance will be cleared and the work will require a minimum of two persons; one person undertaking the hot works, and the second performing a fire watch. Suitable fire extinguishers must be to hand when work is carried out. A fire watch will be carried out for a suitable period after hot works have ended, particularly at the end of a working day. The hot works must cease at least one hour before the end of the working day. Visual checks will be made of the relevant equipment/ area and will be recorded on both the Hot Works Permit and monitoring record. Smoking is permitted on-site in one marked designated external area. This area is situated away from combustible waste processing and storage operations to prevent accidental ignition. Vehicles including mobile plant will not be parked near waste storage areas unless unloading. A minimum 6 metre separation distance will be adhered to except during unloading or loading of waste. During non-operational hours mobile plant will be parked in a designated area inside the building which allows at least 6m from waste or building walls. Road vehicles will be parked in the designated parking area. The recharging of forklift truck and other mobile plant batteries will not be carried out on site.

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Segregation	
You should keep different types of waste segregated if contamination would hamper the recovery of the waste.	All waste streams coming into site will be kept separately either in storage bays or containers. The facility will separate any mixed waste streams as far as possible and the segregated streams will be kept separate pending recovery or disposal elsewhere.
Where paper, plastic, metal or glass have been separately collected, they must not be mixed with other waste or material. This duty applies where keeping waste separate is required and to facilitate or improve recovery of the waste.	As above.
RDF or SRF storage	
Bales of refuse derived fuel (RDF) and solid recovered fuel (SRF) must be securely wrapped with high-density polyethylene (HDPE) membrane or equivalent. This is to prevent the ingress of water, access by pests and odour release. You should inspect bales regularly and rewrap any that are damaged. If wrapped securely, they can be stored outside (unless your permit forbids this). If you store bales outside, your fire prevention plan must manage risks from solar heating during hot weather.	If bales of RDF are produced then they will be wrapped in HDPE and inspected regularly. Any bales that are damaged will be rewrapped. The bales will be stored inside the building with a 6m separation distance between the stack and other wastes or other combustible or flammable materials. The stack size will be within the maximum permitted stack size of 450m^3 (12.5m (l) x 10m (w) x 3.6m (h))
You must minimise RDF and SRF storage duration. You must implement an auditable bale identification system so that you can remove bales in date order.	Bales of RDF will be numbered to ensure a first-in-first-out procedure can be followed. The maximum storage time for the RDF bales will be 4 weeks.
You must have a contract for the end use of your RDF or SRF before you export it abroad. You should not stockpile RDF or SRF whilst you try to agree a contract. You must comply with the limits set out in your approved fire prevention plan at all times. This means that you must implement contingency measures if you cannot secure a contract for the recovery of RDF or SRF within the relevant time, for example by sending old stock to a UK waste incinerator or landfill.	RDF will only be produced if there is a market for it. Otherwise, all of the recyclables will be removed from the waste and the residual waste will be sent to landfill. At the time of writing there are no contracts in place for export of RDF bales; RDF bales will only be produced if such a contract is in place, otherwise the RDF will be bulked and sent to a waste to energy plant.

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Bulk storage	
This section is not applicable as there is no bulk storage of liquid or sludge waste.	
Waste treatment	
Waste treatment must have a clear and defined benefit. You must fully understand, monitor and optimise your waste treatment process to make sure that you treat waste effectively and efficiently. The treated output material must meet your expectations and be suitable for its intended disposal or recovery route. You must identify and characterise emissions from the process and take appropriate measures to control them at source.	The benefits of the waste treatment processes are as follows: • Bulky waste and trade waste - recovery of commodities and materials for recycling and manufacture of RDF which is used for as an energy recovery fuel. • Hard and soft plastics, cardboard and paper – baling for ease of storage and transportation for recycling. • Polystyrene – compression of this difficult waste stream prepares it for recycling.
You must sort incoming waste to prevent unwanted material from entering subsequent waste treatment processes.	All incoming waste that is not pre-segregated is sorted via a screener, overband magnet and eddy current separator and picking line.
You must have accurate and up-to-date written details of your treatment activities, and the abatement and control equipment you are using. You should include information about the characteristics of the waste to be treated and the waste treatment processes, including: • simplified process flow sheets that show the origin of the emissions • descriptions of process-integrated techniques and waste water or waste gas treatment at source, including their performances • diagrams of the main plant items where they have environmental relevance, for example, storage, tanks, treatment and abatement plant design	The proposed waste types and treatment activities are shown in the Process Flow Diagram (Appendix A). At the time of writing the selection of the waste treatment equipment, with the exception of the items below has not been finalised: • Shredder - M&J PreShred 4000S made by Metso • Cardboard baler – Macpresse Europa • Hard plastic baler – Middleton Engineering Other technical descriptions will be available once selections have been finalised.

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• details of physical processes for example separation, compaction, shredding, heating, cooling or washing • details of effluent treatment, including a description of any flocculants or coagulants used • an equipment inventory, detailing plant type and design parameters, for example, time, temperature, pressure • waste types to be subjected to the process • the control system philosophy and how the control system incorporates environmental monitoring information • process flow diagrams (schematics) • the hourly processing capability of waste treatment equipment • venting and emergency relief provisions • a summary of operating and maintenance procedures • process instrumentation diagrams The extent of the information about your treatment activities will depend on the nature, scale and complexity of your facility and the range of environmental impacts it may have. It is also determined by the type and amount of wastes processed.	There will be a number of operating and maintenance procedures in place which will form part of the existing EMS. These procedures will be written once the technology choices have been finalised and will be in line with the operating manuals for the equipment. Building Management System will incorporate: • Thermal imaging system linked to fire alarm • CCTV • Which items of plant are in use and energy usage • Water usage • Function to shut the whole plant down in the case of an incident or accident • Operation of dust extraction and abatement system while the bulky waste shredder is operating. Shut-down of shredder if filters on abatement plant are blocked.
You must have up-to-date written details of the measures you will take during abnormal operating conditions to make sure you continue to comply with permit conditions. Abnormal operating conditions include: • unexpected releases • start-up	Unexpected releases will be covered by the following management system documents: • **Spillage Procedure (OP-04)** • **Dust Management Plan (MS345)**

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• momentary stoppages • shutdown	Start-up, stoppage and shut down procedures will be in place once waste treatment equipment selection has been finalised and prior to operations commencing. These procedures will be based on the manufacturer's instructions and / or manuals.
You must install pressure and vacuum relief valves on all vessels where there is a risk of pressurisation. You must have an automated system that monitors and records the date, time and duration of pressure relief, with appropriate alarms. You must make sure that pressure relief valves reseat correctly.	Not applicable
Liquid waste	
This section is not applicable as no liquid wastes will be accepted**.**	
Soils and inert waste	
Your proposed treatment method must be appropriate for the contaminants in the soil being treated so that you can properly recover the soil for reuse.	Soil will not be treated.
Soil washing is a physico-chemical treatment (not a separation or sorting activity) and you must categorise the outputs accordingly following WM3.	There is no soil washing proposed.
Waste treatment outputs, including fines	
You must not make assumptions about the nature of the outputs from your waste treatment processes. You must make sure that you appropriately classify the outputs following WM3. Failure to do so may breach your Duty of Care for waste and constitute an offence under the Environmental Protection Act 1990.	Fines will be produced as part of the waste treatment process; they will fall out under the screener. These fines will necessarily be landfilled. In order to ensure that the fines are disposed of appropriately, six monthly testing will be carried out in relation to the Waste Acceptance Criteria for landfill and in accordance with WM3.
This is particularly important for fines arising from shredding and trommelling processes, which generally: • require disposal at cost	As above

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• contain a range of contaminants • are likely to be subject to a mirror entry code in the List of Wastes, for example 19 12 11* versus 19 12 12	
Any hazardous waste taken from your facility must be consigned following our guidance Dispose of hazardous waste.	Hazardous waste that may be removed includes incidental hazardous items removed during visual inspection of the bulky waste either during tipping or at the picking line. This waste will be stored in the quarantine area and then consigned as hazardous waste to a suitably permitted facility (within five days maximum). Waste Electrical and Electronic Equipment (WEEE), batteries and fridges will be brought into site from the Household Waste Recycling Sites. They will be bulked up for recovery elsewhere. All hazardous WEEE will be consigned as hazardous waste in accordance with the current guidance.[13]
If an output is not waste, for example because end-of-waste criteria have been met or the material has been produced in accordance with a Quality Protocol, then you do not need to store the output within your permitted area. However, non-waste materials are still able to cause pollution, for which you remain liable. You must implement appropriate measures to prevent and minimise risks of pollution from non-waste and waste materials.	There are no end-of-waste materials produced; all segregated waste materials will be dispatched for recovery off-site as wastes.
Waste treatment for landfill	
You must normally treat waste before it is sent to landfill. Your treatment must follow our guidance Treat waste for landfill.	Any waste that is sent to landfill will have undergone full pre-treatment such that no items which can be recovered or items unsuitable for landfill remain in the waste.

[13] https://www.gov.uk/dispose-hazardous-waste Accessed 18th March 2021

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	In accordance with the guidance on disposing of waste to landfill[14] basic characterisation or level 1 waste assessment will be carried out on the fines which will go to landfill in order to ensure that they are disposed of appropriately. Sampling and analysis every six months will be carried out in relation to the Waste Acceptance Criteria for landfill and in accordance with WM3.
Emissions control	
You must identify, characterise and control emissions from your activities that may cause pollution.	There are no point source emissions to land. Point source emissions to water, sewer, air and fugitive emissions are discussed in subsequent sections. All emissions and the associated risk and control measures are detailed within the Environmental Risk Assessment.[9]
Enclosure within buildings	
Enclosing activities within buildings is an appropriate measure for preventing and minimising emissions of pollution. For waste treatment activities, we consider this to be the default control measure, given that an appropriately designed building will reduce a range of types of pollutants.	All waste treatment will be carried out within the dedicated building.
If your waste treatment activity is likely to cause pollution at sensitive receptors, or if pollution has been substantiated, then you must carry out that waste treatment activity within an enclosed building. This is unless you can demonstrate to us that alternative measures are equally effective or better.	As above
You must also carry out non-treatment activities, such as storing and transferring waste, including loading and unloading, in enclosed buildings if they produce significant emissions that you cannot effectively control by alternative measures.	Some non-treatment activities; storing and transferring waste will be carried out outside the building. This is shown in the Process Flow Diagram (Appendix A). The storage of hard and soft plastic bales, metal in containers and hardcore, plasterboard and glass in bays will be carried out outside the

[14] https://www.gov.uk/guidance/dispose-of-waste-to-landfill Accessed 9th March 2021

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	building. These activities are not deemed to pose a significant risk of fugitive emissions. The waste storage area will benefit from an impermeable concrete surface and sealed drainage (foul sewer) to mitigate the risk of any emissions to water or land. The external bays for glass, plasterboard and hardcore storage will benefit from a water sprinkling system above the bays to mitigate dust. There is a low potential for dust, litter, odour and pests from the waste streams stored outside the building.
An enclosed building means a construction designed to provide sheltering cover and minimise emissions of noise, particulate matter, odour and litter. It must be enclosed on all sides. Its doorways must be as small as practical, and covered with fast-acting doors which default to the closed position. Its windows must be kept closed unless they are required for ventilation. Dirty air must pass through appropriate abatement before being emitted from the building.	The proposed MRF building is enclosed on all sides. There are a number of access and egress points for vehicles so that vehicles can enter the relevant section of the building. There are no windows. The activities which are most likely to generate dust and noise emissions will be carried out in the west section of the building which is enclosed and benefits from speed doors and a dust extraction and abatement system.
Material transfer and storage systems and equipment (for example conveyors, hoppers, containers and tanks) can extend outside the building so long as they are also fully enclosed.	There are no conveyors, hoppers, containers or tanks that extend outside the building. However, there may be containers of metal and hard and soft plastic bales stored outside. In addition, there are four bays for the storage of hardcore, plasterboard and glass which are external to the building.
You must regularly assess your building's integrity. You should consider using BS EN ISO 9972:2015 to demonstrate building containment. This method is based on fan pressurisation. You should carry out a smoke test at least annually.	Any integrity issues with building will be recorded on an Incident and Accident Report and dealt with as soon as possible.
Enclosed buildings must be ventilated to provide a safe working environment for employees. Your building's ventilation system must be properly designed and effective in order for the building to provide adequate containment and prevent fugitive emissions and noise breakthrough. The engineer designing the ventilation system must be appropriately qualified. In order to validate the size	The offices and welfare areas will have an air conditioning system. The west section of the building benefits from a dust extraction and abatement system. The east section of the building will ordinarily operate with the doors open to provide ventilation to workers.

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of supply points (louvers), and the volume of dirty air that needs to be extracted, the engineer must understand and consider: • the needs of the occupants working in the building • heat release • the volume of moist gas emissions that will be generated You should reference the engineering report in your management system.	All surfaces are concrete which will reduce the likelihood of dust raising. The operation will be managed in accordance with a **Dust Management Plan (MS345)**. The site will not accept biodegradable waste and therefore odour is a low risk. Noise reduction measures include: • the operation of the bulky waste shredder and the screener within an enclosed section of the building; and • noise insulation on the output shoots from the overband magnet and the eddy current separator.
The air inside the building must be maintained under negative pressure, or you must install a localised extraction system that extracts dirty air from sources of pollution within the building. Sources that could potentially benefit from localised extraction include: • shredders and trommels • waste loading and unloading areas • odorous stockpiles	The west section of the building will be maintained under negative pressure and will benefit from a dust extraction and abatement system providing up to 10 air changes an hour within the building. The dust will be drawn from a cowling around the bulky waste shredder and twin screens in addition to a high level extraction system in the eaves.
You must regularly assess the integrity of your building for damage that could result in fugitive emissions including noise breakthrough. You must prevent and minimise damage by implementing a maintenance programme.	The integrity of the building will be checked as part of daily checks and any repairs made as soon as practicable.
You must implement a policy controlling door opening, to make sure that the engineered ventilation system works as effectively as possible. It must direct emissions to the abatement system, rather than letting them escape as fugitive emissions through doors or windows. If you use negative pressure, it must be maintained when doors are opened, and you must monitor the pressure to demonstrate its effectiveness. Additional measures to minimise	West section – see above East section - Doors will normally be open during operational hours. If required, due to e.g. abnormal dust or noise emissions the doors may be closed to reduce fugitive emissions in this instance however prevention of the emission at source will be the key control measure.

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fugitive emissions may be required in some cases, for example installing an airlock entry system.	
To reduce emissions of noise and vibration, the building must have an appropriate minimum surface density. You must install acoustic seals on doors and windows, following advice from an acoustic specialist.	Noise will be controlled at source through: • the operation of the bulky waste shredder and the screener within an enclosed section of the building; and • noise insulation on the output shoots from the overband magnet and the eddy current separator.
Point source emissions to air (channelled emissions)	
You must use appropriate measures to make sure that you collect, extract and direct all process emissions to an appropriate abatement system for treatment before release.	There will be a dust extraction and abatement system in place to remove particulate matter arising in the west section of the building in particular from the bulky waste shredder and the screens.
You must identify the main chemical constituents of your facility's point source emissions as part of your inventory of emissions to air. You must include the speciation of volatile organic compounds (VOCs) if you have identified them in the inventory and it is practicable to do so. You must characterise your emissions sufficiently to make sure that your chosen abatement systems are effective	See Section 3, Assessment against BAT Conclusions for Waste Treatment, BAT 3 – Inventory of Waste Water and Waste Gas.
You must make an assessment of the fate and impact of the substances emitted to air, following the Environment Agency's risk assessment guidance.	There is an Environmental Risk Assessment (qualitative), an H1 assessment and an Air Quality Impact Assessment (AQIA) that support this permit application.[15] The AQIA concludes that the long-term and short-term impacts from EP3 at all receptors can be screened out as not significant and there is no need for further assessment.

[15] Air Quality Impact Assessment, Earthcare Technical, ETL695/AQIA/V1.0/04 Mar 2022

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To reduce point source emissions to air (for example dust and odorous compounds) from the treatment of waste, you must use an appropriate combination of abatement techniques. Or you must demonstrate to us that your alternative abatement is equally effective or better. The appropriate combination of abatement techniques would include one of more of the following: • adsorption • biofiltration, biotrickling or bioscrubbing • cyclone • fabric filter • water injection (into a shredder)	The appropriate combination of techniques for dust abatement has been deemed to be water injection into the bulky waste shredder (on demand) and abatement of dust through fabric filters.
You must assess and design vent and stack locations and heights to make sure dispersion capability is adequate and pollution is prevented. You may need to carry out dispersion modelling to establish whether the height of the vent or stack allows emissions to disperse appropriately, preventing any impacts on receptors.	An Air Quality Impact Assessment was carried out with respect to emissions of dust from EP3 (dust abatement plant stack) which concluded that the long-term and short-term impacts at all receptors can be screened out as not significant and there is no need for further assessment.
Where monitoring is required, including for odour, you must install suitable monitoring points which meet the sampling standard for the relevant pollutants.	The sampling point for dust at the stack from the dust abatement plant (Emission point 3) will be designed in accordance with BS EN 15259.
You must have procedures to make sure that you correctly operate, monitor and maintain abatement equipment. For example, monitoring and maintaining: • appropriate liquor flow and concentration in wet scrubbers	The efficacy of the dust abatement system will be monitored via pressure detectors at either side of the fabric filters. They will detect if the filters are blocked and need replacing. If the pressure sensors show a blockage this will trigger an alarm and a shut down of the bulky waste shredding, and therefore screening processes.

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• the handling and disposal or regeneration of spent scrubber or filter medium	
Your monitoring should demonstrate the effectiveness of the abatement, so that you can take preventative or corrective action as necessary.	See above
You should implement contingency measures for abatement system down-time and for any abnormal events, for example biofilter media change. These should include suspending operations until the site is back under control, or having standby abatement available	See above re operation suspension. The installer Extracair will provide a service contract for the dust extraction and abatement system which will include inspection and maintenance and call -out. Some of the routine maintenance tasks e.g. cleaning of ducts will be carried out in house in accordance with manufacturers training and instructions. Spare fabric filters will be kept on site and staff will be trained in replacement of the fabric filters.
You should design and operate abatement systems to minimise water vapour plumes.	Not applicable.
Fugitive emissions to air	
You must use appropriate measures to prevent and minimise fugitive emissions to air, including dust, mud and litter, odour and noise and vibration.	Appropriate measures to prevent and minimise fugitive emissions for dust, litter, noise and vibration are detailed below and are reflected within the site management system documents. There is a low risk of mud as demonstrated in the Environmental Risk Assessment[9] due to all of the site surfacing being concrete and there being no wastes accepted that may generate muddy deposits. There is a low risk of odour as no biodegradable or odorous wastes will be accepted onto site. Vehicles containing light waste will be covered during transportation. All waste that may give rise to litter will be tipped inside the building. There will be a daily walk around and litter pick as part of the **Daily Site Inspection (ER-07)**. If

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	litter reaches the site perimeter it is likely to be caught within the landscaping plants or the mesh netting. Appropriate measures for dust and noise are detailed elsewhere in this document.
You must use your waste pre-acceptance, waste acceptance and site inspection checks and procedures to identify and manage wastes that could cause, or are causing, fugitive emissions to air. When you identify any such wastes you must: • take appropriate risk-assessed measures to prevent and control emissions • prioritise their treatment or transfer	Waste pre-acceptance checks at the HWRS will ensure that no biodegradable wastes or dusty wastes are included in the bulky waste stream. Waste acceptance checks will ensure that biodegradable or dusty wastes that have been inadvertently included are separated and managed inside the building. Trade waste customers are not permitted to bring dusty wastes, sludges or biodegradable wastes to site. This will be controlled through waste acceptance checks and waste rejection where appropriate.
Where necessary to prevent fugitive emissions to air from the storage or handling of wastes, you should use a combination of the following measures: • store and handle the waste within an enclosed building • use fully enclosed material transfer and storage systems and equipment outside buildings, for example conveyors, hoppers, containers, tanks and skips • keep doors closed except when access is required • keep enclosed buildings and equipment under adequate negative pressure with an appropriate abated air circulation or extraction system, locating air extraction points close to potential emission sources • use fast-acting or 'airlock' doors that default to closed	All waste will be treated inside the building. There are no conveyors outside the building. Doors on the west section of building will be kept shut except for vehicle access and egress; this will be controlled via Standard Operating Procedures and staff training. The doors are speed doors. This section of the building will be kept under negative pressure and will benefit from a dust extraction and abatement system.

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You must have an appropriate, regular maintenance programme covering all buildings, plant and equipment. It must help prevent emissions or minimise them. Your maintenance programme must include: • a leak detection and repair programme to promptly identify and mitigate any fugitive emissions of organic compounds from treatment plant and associated infrastructure (for example, pipework, conveyors or tanks) • regular inspection and cleaning of all waste storage and treatment areas and equipment (including conveyor belts) to avoid large scale contamination activities • preventing plant and equipment from corroding (for example, conveyors or pipes) – including selecting and using appropriate construction materials, and lining or coating equipment with corrosion inhibitors	There will be a comprehensive planned preventative maintenance programme in place which will include: • Vehicles – defects on vehicles linked to Waste Logics (waste tracking system) • The building itself • All concrete surfacing • Drainage system (foul and surface water) including interceptors • Waste bays • Waste storage containers • The drenching system comprising of water heads somewhat similar to those of sprinklers; • Static plant • Conveyors; to include weekly cleaning • Mobile plant • Electrical systems • Dust extraction and abatement plant There is a very low risk of any fugitive emissions of organic compounds arising from the waste treatment process primarily due to the fact that biodegradable wastes will not be accepted. All waste storage areas will be cleaned when empty; waste will be managed using a first-in-first-out principle wherever possible. All of the waste treatment equipment and the conveyors will be thoroughly cleaned on a weekly basis.

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	Construction materials have been selected as appropriate for function. There will be no corrosive materials on site. WEEE and batteries will be stored in sealed metal containers.
You should monitor and log weather conditions – temperature, wind speed and direction, and describe any precipitation (for example none, drizzle, heavy rain, snow). You can use this information to identify when dispersion conditions are poor (that is, periods of warm, calm weather with wind blowing towards sensitive receptors). You can also use it to inform decisions to implement additional short-term pollution control contingency measures. You should carefully position your weather station, for example do not place it in between buildings. There is guidance in the World Meteorological Organization's Guide to Meteorological Instruments and Methods of Observation.	A weather station will be installed on site and a record will be made of weather conditions in the Site Diary.
Rely on dispersion and wind direction to minimise pollution at sensitive receptors must be a last resort and you must not use it instead of measures that prevent and reduce pollution.	There will be adequate measures in place to control fugitive emissions at source as previously described to ensure that relying on dispersion will not be required to minimise pollution at sensitive receptors.
Other measures for dust, mud and litter	
If your activities are likely to produce dust and particulates, mud or litter that could cause pollution at sensitive receptors, or if such pollution has been substantiated, you must implement and regularly review a dust, mud and litter management plan. You must do this following our guidance. Your dust, mud and litter management plan must explain how you will prevent and minimise emissions of dust, mud and litter from your facility.	The **Dust Management Plan (DMP)**[17] explains how emissions of dust will be prevented and minimised through monitoring and control measures. The DMP will be reviewed every year as a minimum and following any substantiated complaints or detection of dust outside the site boundary.
Measures such as litter fencing and micro-netting should be located as close as possible to areas where you load and unload light-weight loose waste, if this	All waste activities with the potential to generate litter will be carried out within the building. Daily housekeeping will be carried out to keep the site

Appropriate Measure	Assessment of Compliance
activity is done outdoors. You should not rely on fences and screens at the perimeter of your facility to stop litter escaping.	tidy. If litter escapes to the yard outside the building it will be caught in the anti-climb mesh of the perimeter fence.
Measures such as mist sprays should be located as close as possible to point source emissions of dust, for example at conveyors, trommels, shredders, and at building entrances – except where this would increase odour from biodegradable waste.	There will be a water mist spray within the bulky waste shredder to be used on demand. There will be hoses throughout the building (50m) which can be used for localised dust suppression if needed. There will be mist sprays operating over the external storage bays used for hardcore and glass storage. There will be a water hose connection point outside the building near to the external waste bays which can be used for additional dust suppression in this area if needed.
If measures such as using hoses and road sweepers do not prevent mud escaping onto the public highway, you must take further measures and you must consider installing a high pressure wheel wash. Regardless of the measures you use, you must make sure that you minimise water consumption, and that contaminated water does not escape from your facility, unless you can lawfully discharge it.	Due to the nature of the permitted waste types and the presence of an impermeable surface throughout the facility, mud is not anticipated to be an issue. Appropriate measures will be taken if there is any risk of mud being carried out onto the highway from the site. There will be vehicle wash area which can be used to remove mud from vehicles if required.
Other measures for odour	
The Environmental Risk Assessment[9] has determined the risk of odour to be low from the proposed operation due to the nature of the proposed feedstocks. Therefore this section has not been assessed.	
Other measures for noise and vibration	
If your activities are likely to produce noise or vibration pollution at sensitive receptors, or such pollution has been substantiated, you must implement and regularly review a noise and vibration management plan, following our guidance H2 part 2 noise assessment and control. Your noise and vibration management plan must explain how you will prevent and minimise emissions of noise and vibration from your facility.	A noise assessment carried out as part of the planning application for the site concluded that:

Appropriate Measure	Assessment of Compliance
	'With respect to operational noise, the proposed design and layout of the site, in conjunction with operating protocols are considered to ensure that noise complaints from residential and commercial properties are not likely'.[16]
For noise, your noise and vibration management plan must be informed by a Noise Impact Assessment carried out following the methodology of BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'.	A noise and vibration management plan has not been produced as it is deemed that the proposed activities are not likely to produce noise or vibration pollution at sensitive receptors. A noise and vibration management plan will be implemented as required in accordance with a request from the Environment Agency and / or permit conditions.
For vibration, your noise and vibration management plan must be informed by a Vibration Impact Assessment carried out following the methodology of BS 6472-1:2008 'Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting'.	As above
Point source emissions to water (including sewer)	
You must identify the main chemical constituents of your facility's point source emissions to water and sewer as part of your inventory of emissions.	Emissions to sewer which will be quantified through water quality sampling in accordance with the trade effluent consent conditions (not determined at the time of writing).
You must assess the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance.	Point source emissions to sewer (foul and surface) have been considered as part of the Environmental Risk Assessment.[9]
Discharges to water or sewer must comply with the conditions of an environmental permit and trade effluent consent.	The quality of water being discharged to the surface water sewer will be controlled through housekeeping controls and ensuring that all areas designated as clean are kept clear of waste. In addition, the interceptor will be inspected and maintained as part of the site planned preventative maintenance programme. There will be a gate valve which can be used to hold surface water within the attenuation tank if there is any concern over water

[16] Noise Statement APP/12/01512, Terence O'Rourke, 31st January 2013,

Appropriate Measure	Assessment of Compliance
	quality or if a spillage enters the clean drainage system. There will also be a sampling facility to allow the quality of water being discharged to the surface water sewer to be checked. The quality of the water entering the foul sewer will be managed to ensure that trade effluent consent conditions are met. At the time of writing the trade effluent consent including volumes has been agreed in principle with Wessex Water.
Relevant sources of waste water include: • runoff from all waste storage and handling areas, including loading and unloading areas • process water • condensate collected from treatment process • waste compactor runoff • vehicle washing • washing of containers and vessels • soil washing effluent • vehicle oil and fuel leaks • spills and leaks • rainwater from bunds around containers and tanks	The areas of the site used for the storage and treatment of waste and for vehicle washing will drain to the foul sewer as waste water.
To reduce emissions to water and sewer, if you need to treat waste water before discharge or disposal, you must use an appropriate combination of treatment techniques. Or you must demonstrate to us that your alternative	All waste water will pass through a Klargester wash down separator prior to discharge to the foul sewer. The washdown separator comprises of a silt catcher then a triple interceptor with a smart filter, which acts like a sponge.

Appropriate Measure	Assessment of Compliance
treatment is equally effective or better. An appropriate combination of treatment techniques includes one of more of the following: • preliminary or primary treatment – for example, equalisation, neutralisation or physical separation • physico chemical treatment – for example, adsorption, distillation or rectification, precipitation, chemical oxidation or reduction, evaporation, ion exchange, or stripping • biological treatment – for example, activated sludge process or membrane bioreactor • nitrogen removal – for example, nitrification and denitrification • solids removal – for example, coagulation and flocculation, sedimentation, filtration or flotation	The washdown separator will be subject to planned preventative maintenance and inspection.
You must segregate uncontaminated water streams (for example clean runoff from roofs) from those that require treatment.	The site has been designed to ensure that any clean areas such as building roofs, and areas not used for the storage and treatment of waste will not combine with the waste water such that the volume going to foul sewer will be minimised.
You must separate contaminated water streams based on pollutant content and treatment required. For example, you may need to collect and treat separately contaminated surface runoff water and process water.	The pollutant content of the waste water sources from site are deemed to be roughly equivalent therefore all waste water will be collected and discharged together.
Fugitive emissions to land and water	
You must use appropriate measures to control potential fugitive emissions and make sure that they do not cause pollution. See the guidance on emissions to water and leaks from containers.	The proposed measures to control fugitive emissions to land and water are detailed below and reflected in the Environmental Risk Assessment.[9]

Appropriate Measure	Assessment of Compliance
You must design appropriate surfacing and containment or drainage facilities for all operational areas, taking into account: • collection capacities • surface thicknesses • strength and reinforcement • falls • materials of construction • permeability • resistance to chemical attack • inspection and maintenance procedures • relevant standards of construction • end use, for example by tracked or wheeled vehicles or vehicle weight	The drainage system has been designed by specialist engineers Calcinotto taking into account predicted flows, rainfall events, loading on surfacing and the types of materials to be stored.
Your drainage infrastructure must: • prevent incompatible wastes coming into contact with each other • make sure that fire cannot spread	Waste streams will segregated on site through the use of bays, containers and separation distances as detailed in the **Fire Prevention Plan (MS317)** and Site Specific Working Plan.
You must store and treat all waste on an impermeable surface with contained drainage that meets CIRIA 736 or an equivalent approved standard. The impermeable surfaces must have sealed construction joints. These requirements do not apply in designated areas where the waste being stored or handled does not pose any significant risk of contaminating surface water or ground water. You must appropriately isolate these designated areas from other operational areas so that there cannot be any flows between them, including in the event of an accident, for example a fire.	All wastes will be stored and treated on an impermeable surface with sealed drainage. All wastes will be non-hazardous with the exception of: • WEEE which will be stored in sealed containers at all times • Fridges may be stored on the concrete for short periods of time during bulking but will usually be stored in curtain sided trailers. • Batteries which will only be stored in palletised battery boxes.

Appropriate Measure	Assessment of Compliance
	• Paints, inks, resins and adhesives which will be stored in sealed, stackable stillages.
You must provide bunds for all tanks containing liquids (whether waste or otherwise) that could be harmful to the environment if spilled. Bunds must meet the CIRIA 736 standard and: • be impermeable, stable and resistant to the stored materials • have no outlet (that is, no drains or taps) and drain to a blind collection point • have pipework routed within bunded areas with no penetration of contained surfaces • be designed to catch leaks from tanks or fittings • have an appropriate capacity • have regular visual inspections - any contents must be pumped out or otherwise removed under manual control after checking for contamination • be fitted with a high level probe and an alarm (as appropriate) if not frequently inspected • have tanker connection points within the bund (where possible), and if not possible you must provide adequate containment for spillages or leakage • have programmed engineering inspections (extending to water testing if structural integrity is in doubt) • be emptied of rainwater regularly to maintain the containment capacity	Diesel will be stored in an integrally bunded 5,000 litre tank. The tank will be fitted with a level monitor and leak detection which will be remotely connected to the weighbridge office.

Appropriate Measure	Assessment of Compliance
All above-ground tanks containing liquids (whether waste or otherwise) that could be harmful to the environment if spilled must be kept on an impermeable surface with contained drainage that meets CIRIA 736 or an equivalent approved standard. You must fit the tanks with alarms and cut-out systems to detect and prevent leaks and spills.	All above ground tanks will be kept on an impermeable surface. All tanks will be fitted with a level monitor and leak detection which will be remotely connected to the weighbridge office.
You must minimise using subsurface equipment and infrastructure, and decommission it where possible. For subsurface structures, you must: • establish and record the routing of all site drains and subsurface pipework • identify all subsurface sumps and storage vessels • engineer systems to minimise leakages from pipes and make sure they can be detected quickly if they do occur • provide secondary containment or leakage detection for subsurface pipework, sumps and storage vessels – vessels must be fitted with alarms and cut-out systems to detect and prevent spills when filling • establish an inspection and maintenance programme for all subsurface structures, for example, pressure tests, leak tests, material thickness checks or CCTV	There is no subsurface infrastructure proposed with the exception of the drainage system and supply of services (water and electricity). There will be as built plans of the drainage system produced post construction. The drainage system will be subject to a planned preventative maintenance programme including a CCTV drainage survey every five years from date of commissioning.
You must provide secondary containment that meets CIRIA 736 or an equivalent approved standard, for all drums and other mobile containers which: • are greater than 200 litres in capacity and are kept outside • contain liquids (whether waste or otherwise) that could be harmful to the environment if spilled	There will be oil drums for hydraulic and engine oil stored inside the building over bunded drip trays designed to take contents of the drum. The drip tray capacity will not be compromised due to rainwater ingress due to storage inside the building.

Appropriate Measure	Assessment of Compliance
You must assess whether groundwater is sufficiently well protected from discharges from your lagoons using our guidance Protect groundwater and prevent groundwater pollution. Lagoons used for storing liquids whose release could be harmful to the environment must meet CIRIA 736 or an equivalent approved standard. If a lagoon is uncovered, you must maintain a minimum level of 750mm free-board at all times and use an automated alarm system that will warn you if this minimum level is exceeded.	There are no lagoons proposed.
You must comply with the Oil Storage Regulations. These apply to non-hazardous wastes such as vegetable and cooking oil, as well as to biofuels and mineral oils.	All oils will be stored in accordance with the Oil Storage Regulations as previously described.
You must provide appropriate buffer storage capacity at your facility to store waste waters, taking into account: • potential abnormal operating scenarios and incidents • the nature of any polluting substances and their impact on the downstream waste-water treatment plant and receiving environment	Waste waters will be discharged to the foul sewer in accordance with consent from Wessex Water. In the case of abnormal operating scenarios and incidents there will be buffer storage on site in the form of the attenuation tank associated with the surface water drainage system which will have a gate valve to prevent discharge and can hold 300m^3. In addition the site is designed to flood to 100mm which will allow an additional 525m^3 of buffer storage. The area designed to flood is shown on Site Plan (1428 - SYM - 00 - GF - DR - A – 0305 - P01) in Site Plans.
You must have appropriate measures to monitor, treat and reuse the water held in the buffer storage before discharging.	Water held within the attenuation tank may be sampled at the sample point and could be pumped out of the attenuation tank as required or diverted to the foul sewer, subject to permission from Wessex Water.
You must take appropriate measures to prevent emissions from washing and cleaning activities, including: • containing and directing spray, liquid effluent and wash-waters to foul sewer or collecting them in a sealed system for offsite disposal – you must not discharge them to surface or storm drains	There will be a dedicated vehicle wash bay that will drain to the foul sewer. Traffic Film Remover will be used to wash the vehicles which is non-caustic and has a biodegradable formulation. Cleaning products will be stored in 20l containers on a bunded pallet in a building.

Appropriate Measure	Assessment of Compliance
• where possible, using biodegradable and noncorrosive washing and cleaning products • storing all detergents, emulsifiers and other cleaning agents in suitable bunded or containment facilities, within a locked storage area, or in a building away from any surface water drains • preparing cleaning or disinfection solutions in contained areas of the site and never in areas that drain to the surface water system or groundwater	There will be no preparation of cleaning or disinfection solutions prepared on site.
You must produce and implement a spillage response plan and train staff to follow it and test it.	There is a **Spillage Procedure (OP-04)** which forms part of the EMS. Quarterly drills are carried out on the **Spillage Procedure**.
Your procedures and associated training must make sure you deal with spillages immediately. You should follow the manufacturer's health and safety advice for any products or substances involved.	The **Spillage Procedure** sets out the steps for dealing with a spillage including stopping the source by any means possible and containing the spillage before cleaning it up.
You must keep spill kits at locations close to areas where a spillage could occur and make sure relevant staff know how to use them. You must make sure kits are replenished after use.	Spill kits in portable containers (e.g., wheelie bins) will be placed at strategic locations around the site including near storage locations for fuel and chemicals and in plant working areas where there is a risk of oil or fuel leaks from vehicles. The location of spill kits will be marked on a plan which will be displayed in the site office. Staff will be trained in the use of spill kits as part of the **Spillage Procedure** training detailed above.
You must stop spillages from entering drains, channels, gullies, watercourses and unmade ground. You must make available proprietary sorbent materials, sand, booms or drain mats for use when required.	The actions within the **Spillage Procedure** will ensure that spills are contained as close to source as possible. There are no areas of unmade ground on site where spillages may occur. If a spillage enters the surface water drainage system, the design will allow this spillage to be captured within the drainage system as required. The foul drainage system also allows the containment of spillages in the washdown separator.

Appropriate Measure	Assessment of Compliance
You must make sure your spillage response plan includes information about how to recover, handle and correctly dispose of waste produced from a spillage.	The **Spillage Procedure (OP04)** includes details on how to dispose of materials used to clean up a spillage including PPE. It states that if the spill was potentially hazardous, then all waste must be disposed of as hazardous waste.
You must have a documented inspection and maintenance programme for impermeable surfaces and containment facilities, and keep records to demonstrate its implementation.	Concrete surfacing and kerbing will be inspection daily as part of the **Daily Site Inspection (ER-07)**.
Pests	
You must manage waste in a way that prevents pests. For example, if you do not manage flies, rats and birds they can affect operations, be a nuisance to neighbours and pose an environmental and health hazard as a potential vector for pathogens. Guidance on fly management is available.	In accordance with the Environmental Risk Assessment[9] due to the types of waste that will be stored and treated, there is deemed to be a low risk of pests on site. The **Waste Acceptance and Rejection Procedure (MS340)** will ensure that only permitted wastes are accepted on to site and that biodegradable wastes will not be accepted.
If you expect pests will cause pollution, hazard or annoyance at sensitive receptors, or if this has been substantiated, you must create, use and regularly review a pest management plan, following our guidance.	A pest management plan has not been prepared as part of the permit application due to the rationale above. However, if it is required at a later date, a pest management plan will be implemented.
Your pest management plan must include procedures for: • the inspection and control of pests • rejecting loads of infested waste treating pest infestations promptly, and removing waste if necessary • storing, handling and using approved pest control products – you can get information on using chemicals at work from the Health and Safety Executive	Notwithstanding the above, W&S will employ the services of a specialist pest control contractor who will carry out regular pest control inspections on site and control measures will be employed as required.
Emission monitoring & limits	

Appropriate Measure	Assessment of Compliance
We may set emission limits and monitoring requirements in your permit, based upon your treatment process, emissions inventory and environmental risk assessment. An emissions inventory means a complete and detailed list of all waste waters and waste gases that you handle or produce at your facility.	See Section 3, Assessment against BAT Conclusions for Waste Treatment, BAT 3 – Inventory of Waste Water and Waste Gas.
If your environmental permit requires you to monitor emissions, you must do so following our monitoring guidance. You may need monitoring infrastructure to meet the relevant standards.	Any monitoring that is required by the environmental permit will be carried out in accordance with permit conditions and with reference to the current guidance.
Emissions to air	
Your facility's emissions inventory must include information about the relevant characteristics of point source emissions to air, such as the: • average values and variability of flow and temperature • average and peak concentration and load values of relevant substances and their variability • flammability, lower and higher explosive limits and reactivity • presence of other substances that may affect the waste gas treatment system or plant safety, for example, oxygen, nitrogen, water vapour, dust	Monitoring data will be gathered from EP3 (the stack for the dust abatement plant). The abatement plant will be capable of treating up to 10 air changes per hour within the west side of the building.
If your facility's permit does not specify emissions limits for point source emissions to air, you should still identify appropriate numerical limits, for example for: • odour • particulates • chemical constituents	There is an assumption that an emission limit for dust from EP3 (the dust abatement plant stack) will be stipulated within the environmental permit. Monitoring of emissions to air will be carried out in accordance with BAT 8 (See Section 3, Assessment against BAT Conclusions for Waste Treatment, BAT 8). Odour and chemical constituents are not anticipated.

Appropriate Measure	Assessment of Compliance
You should monitor against these limits to demonstrate the performance of your abatement, and to establish trigger levels for action before pollution arises. You should describe your monitoring programme in your management system, or the appropriate emissions management plan. Your monitoring programme should follow our guidance, and should set out the relevant numerical limits and the actions you take if they are breached.	
You must monitor fugitive emissions of dust and particulates if they are likely to cause pollution at sensitive receptors, or if this has been substantiated. You must describe your monitoring programme in your dust management plan. Visual monitoring is not effective for assessing the risk of emissions of fine particulates, for example PM_{10}. You should use dust and particulate monitors with trigger alarms instead. You should set alarm trigger levels to alert site staff when short-term particulate concentrations are elevated, so that you can review site practices or increase your mitigation measures. They can also provide evidence to demonstrate that your facility is not the cause of complaints, when combined with weather data. You should use a particulate limit of 75µg/m³ to 100µg/m³ (over a 5-minute average) for PM_{10} as an initial trigger for action and reduce this after the system has been in place for some time.	The **Dust Management Plan**[17] explains how emissions of dust will be prevented and minimised through monitoring and control measures. It is proposed that dust will be monitored through daily visual inspections and recorded in the **Daily Site Inspection Sheet (ER-07)**. Dust will be primarily prevented through: • the use of concrete surfaces for vehicle movements and waste storage; and • waste acceptance procedures. Dust will be controlled and minimised through: • enclosure of treatment activities in the building with the activities likely to be generating dust to be carried out in the west section of the building which will benefit from speed doors and a dust extraction and abatement system; and • water misting sprays over the external waste storage bays used to store hardcore, plasterboard and glass.
Emissions to water and sewer	
Your facility's emissions inventory must include information about the relevant characteristics of point source emissions to water or sewer, such as:	The emissions to sewer which will be quantified through water quality sampling in accordance with the trade effluent consent conditions (not determined at the time of writing).

Appropriate Measure	Assessment of Compliance
• average values and variability of flow, pH, temperature, and conductivity • average concentration and load values of relevant substances and their variability, for example, Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC), nitrogen species, phosphorus, metals, priority substances or micropollutants • data on bio-eliminability, for example, Biochemical Oxygen Demand (BOD), BOD to COD ratio, Zahn-Wellens test, biological inhibition potential (for example, inhibition of activated sludge)	
For relevant emissions to water or sewer identified by the emissions inventory, you must carry out monitoring of key process parameters (for example, waste water flow, pH, temperature, conductivity or BOD) at key locations. For example, these could either be at the: • inlet or outlet (or both) of the pre treatment • inlet to the final treatment • point where the emission leaves the facility boundary	There will be a sample point after the washdown separator and before the sewage from the welfare facilities go in which will provide a representative sample of waste water from the installation.
Process efficiency appropriate measures	
For your facility, you must monitor and review the annual quantity of: • water, energy and raw materials used • residues and waste water produced You must do this at least once every year.	All of these parameters will be monitored and reviewed in line with permit conditions. Monitoring of energy and water use will be carried out monthly to comply with BREEAM requirements.
Energy efficiency (installations only)	

Appropriate Measure	Assessment of Compliance
You must create and implement an energy efficiency plan at your facility. This must: • define and calculate the specific energy consumption of the activity (or activities) you carry out and waste stream(s) you treat • set annual key performance indicators, for example specific energy consumption (expressed in kWh/tonne of waste processed) • plan periodic improvement targets and related actions	At the time of writing the selection of the waste treatment plant has not been finalised. Once all of the machinery has been selected the forecasted energy consumption will be known. Energy efficiency is an important selection criterion in technology choice. The electrical system has been designed with individual metering for all elements to allow base points to be set and potential target and times around use to be implemented.
You must regularly review and update your energy efficiency plan as part of your facility's management system.	The Energy Efficiency Plan will be reviewed annually.
You must have and maintain an energy balance record for your facility. This must provide a breakdown of your energy consumption and generation (including any energy or heat exported) by the type of source (electricity, gas, conventional liquid fuels, conventional solid fuels, and waste). You should provide Sankey diagrams or energy balances to show how energy is used in your waste treatment processes.	At the time of writing there is not sufficient information to compile and energy balance record. This can be completed once equipment selection is finalised.
You must regularly review and update your energy balance record as part of your facility's management system, alongside the energy efficiency plan.	The Energy Balance Record will be reviewed annually alongside the Energy Efficiency Plan.
You must have operating, maintenance and housekeeping measures in relevant areas, for example: • air conditioning, process refrigeration and cooling systems (leaks, seals, temperature control, evaporator or condenser maintenance) • the operation of motors and drives • compressed gas systems (leaks, procedures for use) • steam distribution systems (leaks, traps, insulation)	Drives and motors will be inspected and maintained as part of the planned preventative maintenance programme. This will include the lubrication and cleaning around moving parts to ensure minimisation of friction; this is also a fire prevention technique. The Variable Refrigerant Flow (VRF) system which will provide heating and cooling systems (VRF system) to the office and welfare unit will be inspected and maintained as part of the sites facilities management programme.

Appropriate Measure	Assessment of Compliance
• space heating and hot water systems • lubrication to avoid high friction losses • boiler operation and maintenance, for example, optimising excess air • other maintenance relevant to the activities within the facility	The air conditioning units in the mobile plant will be inspected and maintained in line with service contracts for individual plant items.
You must have measures in place to avoid gross energy inefficiencies. These should include for example: • insulation • containment methods (such as seals and self-closing doors) • avoiding unnecessary discharge of heated water or air (for example, by fitting simple control systems such as timers and sensors)	The main MRF will not be heated. The offices and welfare facilities will be heated and cooled using the VRF system which minimises energy loss by linking heating and cooling. The whole system will be controlled under the building management system to reduce energy losses. The insulation which will be used will meet building control requirements.
You should implement additional energy efficiency measures at the facility as appropriate, following our guidance.	Additional energy efficiency measures will be employed as appropriate.
Raw materials (installations only)	
You must maintain a list of the raw materials used at your facility and their properties. This includes auxiliary materials and other substances that could have an environmental impact.	An inventory of raw materials for the site will be maintained; **Site Stock Register Raw Materials (MS035)**. This document provides a link to the relevant COSHH assessment where appropriate, which are held as part of the management system documentation. Risk assessments and Data Sheets available in EMS folders and intranet system.
You must regularly review the availability of alternative raw materials and use any suitable ones that are less hazardous or polluting. This should include, where possible, substituting raw materials with waste or waste-derived products.	In accordance with **Site Stock Register Raw Materials (MS035)**, the Environmental Working Group is responsible for: • At least every 6 months reviewing the selection of raw materials and the availability of alternative raw materials which are less hazardous

Appropriate Measure	Assessment of Compliance
	or polluting. This should include, where possible, substituting raw materials with waste or waste-derived products. • Changing the raw materials to less hazardous or polluting alternatives where operationally viable. • Ensuring that quality assurance procedures are followed to control the content of raw materials.
You must justify the continued use of any substance for which there is a less hazardous alternative.	As above
You must have quality assurance procedures to control the content of raw materials.	As above
Water use	
You must take measures to make sure you optimise water consumption to: • reduce the volume of waste water generated • prevent or, where that is not practicable, reduce emissions to soil and water	Water use will be limited to; • welfare; • dust suppression – mist sprays on bulky waste shredder (on demand), external waste storage bays and hose points around site; • fire suppression in the case of abnormal operating conditions leading to a fire on site; • vehicle washing; and • washing down within the building.
Measures you must take include: • implementing a water saving plan (involving establishing water efficiency objectives, flow diagrams and water mass balances)	Use of mains water will be metered, monitored and reported as part of permit conditions and in accordance with BREEAM requirements. The water used for dust suppression will be minimised through the use of fine mist spray nozzles to maximise dust suppression.

Appropriate Measure	Assessment of Compliance
• optimising the use of washing water (for example, dry cleaning instead of hosing down, using trigger control on all washing equipment) • recirculating and reusing water streams within the plant or facility, if necessary after treatment • reducing the use of water for vacuum generation (for example, using liquid ring pumps with high boiling point liquids) where relevant	The water used for vehicle washing will be minimised through the use of trigger control hoses and the water use monitored in accordance with BREEAM.
You must carry out a regular review of water use (a water efficiency audit) at least every 4 years.	A water efficiency audit will be carried out every 4 years in accordance with BAT.
You must also: • produce flow diagrams and water mass balances for your activities • establish water efficiency objectives and identify constraints on reducing water use beyond a certain level (usually this will be site specific) • identify the opportunities for maximising reuse and minimising use of water • have a timetabled improvement plan for implementing additional water reduction measures	Water flows are shown on the drainage diagrams submitted as part of the permit application; there are no opportunities for water reuse. Water efficiency savings will be considered year on year as part of facilities management.
To reduce emissions to water, you should apply these general principles in sequence: • use water efficient techniques at source where possible • reuse water within the process by treating it first if necessary – if this is not practicable, use it in another part of the process or facility that has a lower water quality requirement	There are no opportunities for water reuse. Clean roof water and surface water is kept separate from dirty water via the use of separate drainage systems.

Appropriate Measure	Assessment of Compliance
• if you cannot use uncontaminated roof and surface water in the process, you should keep it separate from other discharge streams – at least until after you have treated the contaminated streams in an effluent treatment system and have carried out final monitoring	
You should establish the water quality requirements associated with each activity and identify whether you can substitute water from recycled sources. Where you can, include it in your improvement plan.	Storage and reuse of roof water was not deemed viable as part of site design.
Where there is scope for reuse (possibly after some form of treatment) you should keep less contaminated water streams, such as cooling waters, separate from more contaminated streams.	As above
You must minimise the volume of water you use for cleaning and washing down by: • vacuuming, scraping or mopping in preference to hosing down • reusing wash water (or recycled water) where practicable • using trigger controls on all hoses, hand lances and washing equipment	Water hoses in the vehicle wash have trigger controls. Water usage at each water use location is monitored in accordance with BREEAM requirements.
You must directly measure fresh water consumption and record it regularly at every significant usage point, ideally on a daily basis.	Water usage at each water use location is monitored in accordance with BREEAM requirements.
Waste minimisation, recovery and disposal	
You must have and implement a residues management plan that: • minimises the generation of residues, that is solid waste arising from the treatment of waste	There is a site-specific **Residues Management Plan (MS344)** in place The primary function of the installation is to recycle as much material as possible from mixed waste streams entering the site.

Appropriate Measure	Assessment of Compliance
• optimises the reuse, regeneration, recycling or energy recovery of residues, including packaging • makes sure you properly disposal of residues where recovery is technically or economically impractical	The **Residues Management Plan (MS344)** formalises the decisions regarding the fate of residues including packaging in line with the waste hierarchy. All residues will be handled in line with environmental permitting and duty of care legislation.
Where you must dispose of waste, you must carry out a detailed assessment identifying the best environmental options for waste disposal.	The waste treatment operations at the facility are designed to maximise the recovery of waste from mixed waste streams. The only waste fraction that will require disposal are the waste fines arising from the screening process. There is no available recovery route for this waste stream.
You must review on a regular basis options for recovering and disposing of waste produced at the facility. You must do this as part of your management system to make sure that you are still using the best environmental options and promoting the recovery of waste where technically and economically viable.	The **Residues Management Plan (MS344)** forms part of the EMS. As stipulated in the Residues Management Plan, the recovery and disposal routes and optimisation in line with the waste hierarchy will formally reviewed at least annually by the General Manager.

3. Assessment against BAT Conclusions for Waste Treatment

Environmental Management System

BAT 1	**BAT 1. In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features**
See Appropriate Measures – Management Systems	

Waste Management Measures

BAT 2	**In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below.**
See Appropriate Measures – Waste Pre-Acceptance, Acceptance and Tracking, Output quality and Waste Segregation	

Inventory of Waste Water and Waste Gas

BAT 3	**In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features:**	
i	Information about the characteristics of the waste to be treated and the waste treatment processes, including: • simplified process flow sheets that show the origin of the emissions; • descriptions of process-integrated techniques and waste water/waste gas treatment at source including their performances;	The Process Flow Diagram (Appendix A) shows the waste types and treatment processes. <u>Emission Point 1 (EP1) – Entry point to surface water sewer</u> Surface water passes through an oil and silt interceptor prior to discharge to the surface water sewer. There is also an attenuation tank that can be used to store water to regulate flows and contain spillages. <u>Emission Point 2 (EP2) - Entry point to foul water sewer</u> Foul water passes through a wash down separator prior to discharge to the foul sewer. <u>Emission Point 3 (EP3) – Dust Abatement Plant Stack</u> Emissions to air may arise from the shredding and screening of bulky waste; this activity will be carried out in an enclosed section of the building benefitting from a dust abatement system with a single stack at the apex to the building (approximately 12m high). The dust abatement plant will be capable of treating up to 10 air changes per hour of air within the building. The maximum emission value has been assumed to be 5mg/Nm^3 of dust (average over the sampling period) in accordance with the BAT-AEL for dust within BAT 25.
ii	Information about the characteristics of the wastewater streams	Water going to foul sewer will be sampled and tested to ensure compliance with the Trade Effluent Consent. Rainwater to the surface water is not considered waste water.
iii	Information about the characteristics of the waste gas streams, such as: • average values and variability of flow and temperature;	See above

BAT 3	**In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features:**	
	• average concentration and load values of relevant substances and their variability (e.g., organic compounds, POPs such as PCBs); • flammability, lower and higher explosive limits, reactivity; • presence of other substances that may affect the waste gas treatment system or plant safety (e.g., oxygen, nitrogen, water vapour, dust).	

Waste Storage

BAT 4	In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.	
a	Optimised storage location. This includes techniques such as: • the storage is located as far as technically and economically possible from sensitive receptors, watercourses, etc.; • the storage is located in such a way so as to eliminate or minimise the unnecessary handling of wastes within the plant (e.g., the same wastes are handled twice or more or the transport distances on site are unnecessarily long).	See Section 2, Assessment of Appropriate Measures – Waste Storage
b	Adequate storage capacity. Measures are taken to avoid accumulation of waste, such as: • the maximum waste storage capacity is clearly established and not exceeded taking into account the characteristics of the wastes (e.g., regarding the risk of fire) and the treatment capacity; • the quantity of waste stored is regularly monitored against the maximum allowed storage capacity; • the maximum residence time of waste is clearly established.	See Section 2, Assessment of Appropriate Measures – Waste Storage
c	Safe storage operation. This includes measures such as: • equipment used for loading, unloading and storing waste is clearly documented and labelled; • wastes known to be sensitive to heat, light, air, water, etc. are protected from such ambient conditions; • containers and drums are fit for purpose and stored securely.	There is a dedicated telescopic handler for bulky waste that may contain POPs. The wastes streams accepted for processing are not sensitive to heat, light, air, water etc. and therefore do not need to be protected from ambient conditions. Containers will be fit for purpose and stored securely.

BAT 4	**In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.**	
d	Separate area for storage and handling of packaged hazardous waste. When relevant, a dedicated area is used for storage and handling of packaged hazardous waste.	The acceptance of packaged hazardous waste is not proposed. WEEE, fridges, batteries, paints, inks, resin and adhesives will be segregated and stored appropriately. Bulky waste that may contain POPs i.e. soft furnishings containing flame retardants will be handled in a dedicated section of the building.

Waste Handling & Transfer

BAT 5	**In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.**
See Section 2, Assessment of Appropriate Measures – Waste Storage	

Monitoring

BAT 6	**For relevant emissions to water as identified by the inventory of waste water streams (see BAT 3), BAT is to monitor key process parameters (e.g., waste water flow, pH, temperature, conductivity, BOD) at key locations (e.g., at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).**
	There are no emissions to water. Water going to the surface water sewer will constitute only rainwater.

BAT 7	**BAT is to monitor emissions to water with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.**
	Not applicable, see BAT 6.

Monitoring of Point Source Emissions to Air

BAT 8	**BAT is to monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.**	
Dust	Once every six months. EN 13284-1.	Dust monitoring of the dust abatement plant stack (EP3) will be carried out every 6 months and assessed against the BAT-AEL in BAT 25.

BAT 9 Not Applicable

BAT 10	**BAT is to periodically monitor odour emissions.**
The applicability of BAT 10 is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated. As per the Environmental Risk Assessment[9], the risk of odour emissions impacting sensitive receptors is low. If odour is an issue an odour management plan will be developed and appropriate measures employed to reduce odour.	

Material Efficiency

BAT 11	**BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.**
See Section 2, Appropriate Measures – Energy Efficiency, Raw Materials and Water Use.	

Fugitive Emissions to Air

BAT 12	**In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:**
The applicability of BAT 12 is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated. As per the Environmental Risk Assessment[9], the risk of odour emissions impacting sensitive receptors is low. If odour is an issue an odour management plan will be developed and appropriate measures employed to reduce odour.	

BAT 13	**In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the techniques given below.**	
a	Minimising residence times	Residence times for waste will be minimised but the primary driver for this is fire prevention. See Section 6 of Fire Prevention Plan.[5]
b	Using chemical treatment	This technique is not applicable.
c	Optimising aerobic treatment	This technique is not applicable.

BAT 14	**In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below.**	
a	Minimising the number of potential diffuse emission sources. This includes techniques such as: • appropriate design of piping layout (e.g., minimising pipe run length, reducing the number of flanges and valves, using welded fittings and pipes); • favouring the use of gravity transfer rather than using pumps; • limiting the drop height of material; • limiting traffic speed; and • using wind barriers.	The plant design is optimised to reduce pipe run lengths, flanges and valves. Drop height has been minimised where possible in site design. Operatives loading artics with the 360 will be trained to minimise the drop height. Vehicles are restricted to 5 miles per hour on site as a health and safety measure; this also reduces potential noise and dust emissions. Waste stored outside will be within bays with dust suppression.
b	Selection and use of high- integrity equipment. This includes techniques such as: • valves with double packing seals or equally efficient equipment; • high-integrity gaskets (such as spiral wound, ring joints) for critical applications; • pumps/compressors/agitators fitted with mechanical seals instead of packing; • magnetically driven pumps/ compressors/agitators;	It is company policy to purchase high integrity equipment where possible.
c	Corrosion prevention	Materials are selected for suitability and longevity.
d	Containment, collection and treatment of diffuse emissions	Dust emissions from the west section of the building (where the activities most likely to generate dust are carried out) are minimised by the building being under

BAT 14	**In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below.**	
		negative pressure and the air being treated in the dust extraction abatement system.
e	Dampening	Dust suppression will be carried out in accordance with the Dust Management Plan.[17]
f	Maintenance	All plant and equipment are subject to a planned preventative maintenance programme in accordance with the maintenance section of the EMS:
g	Cleaning of waste treatment and storage areas	The waste storage bays will be cleaned out every time they are empty.
h	Leak detection and repair (LDAR) programme	Not applicable. There are no anticipated emissions of organic compounds

BAT 15 & 16 – Not applicable

[17] MS345 Dust Management Plan, V2.0, March 2022

Noise & Vibration

BAT 17	**In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:**
The applicability of BAT 17 is restricted to cases where a noise or vibration nuisance at sensitive receptors is expected and/or has been substantiated. As per the Environmental Risk Assessment[9], the risk of noise emissions impacting sensitive receptors is low. If noise is an issue a noise and vibration management plan will be developed and additional appropriate measures employed to reduce noise.	

BAT 18	**In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to use one or a combination of the techniques given below.**
See Section 2, Appropriate Measure - Other measures for noise and vibration	

Emissions to Water

BAT 19	**In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below.**
See Section 2, Appropriate Measure – Emissions to water	

BAT 20	In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of the techniques given below: *Only techniques relating to relevant pollutants have been listed*		
	Technique	**Typical pollutants targeted**	
	Equalisation	All pollutants	Waste water passes through a washdown separator prior to discharge to the sewer. The washdown separator facilitates equalisation of flow.
	Physical separation	Gross solids, suspended solids, oil/grease	The washdown separator comprises of a silt catcher then a triple interceptor with a smart filter, which acts like a sponge. The washdown separator will be subject to planned preventative maintenance and inspection.

Emissions from Accidents and Incidents

BAT 21	In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan (see BAT 1)
See Section 2, Appropriate Measures – Accident Management Plan	

Material Efficiency

BAT 22	In order to use materials efficiently, BAT is to substitute materials with waste.	
a	Waste is used instead of other materials for the treatment of wastes (e.g., waste alkalis or waste acids are used for pH adjustment, fly ashes are used as binders).	Raw material use is minimised where possible and is audited in line with the Residues Management Plan **(MS344).** Opportunities will be sought to use waste materials in place of raw materials.

Energy Efficiency

BAT 23	In order to use energy efficiently, BAT is to use both of the techniques given below.
See Section 2, Appropriate Measures – Energy Efficiency	

Waste Reduction

BAT 24	In order to reduce the quantity of waste sent for disposal, BAT is to maximise the reuse of packaging, as part of the residues management plan (see BAT 1).	
	Packaging (drums, containers, IBCs, pallets, etc.) is reused for containing waste, when it is in good condition and sufficiently clean, depending on a compatibility check between the substances contained (in consecutive uses). If necessary, packaging is sent for appropriate treatment prior to reuse (e.g., reconditioning, cleaning).	See Residues Management Plan[18]

[18]Residues Management Plan - Ling Rd, MS344

BAT conclusions for the mechanical treatment of waste

BAT 25	**In order to reduce emissions to air of dust, and of particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.**	
a	Cyclone used as preliminary separators for coarse dust	This technique is not proposed.
b	Fabric filter. May not be applicable to exhaust air ducts directly connected to the shredder when the effects of deflagration on the fabric filter cannot be mitigated (e.g. by using pressure relief valves).	It is proposed to use a dust abatement plant utilising double fabric filter to treat air within the west side of the building where bulky waste shredding and screening will take place.
c	Wet scrubbing	This technique is not proposed.
d	Water injection into the shredder. The waste to be shredded is damped by injecting water into the shredder. The amount of water injected is regulated in relation to the amount of waste being shredded (which may be monitored via the energy consumed by the shredder motor). The waste gas that contains residual dust is directed to cyclone(s) and/or a wet scrubber	This technique will be used on demand in the bulky waste shredder.

BAT – associated emission level (BAT-AEL) for channelled dust emissions to air from the mechanical treatment of waste

Parameter	**Unit**	**BAT-AEL (Average over sampling period)**	
Dust	mg/Nm^3	2-5*	6- monthly stack monitoring will be carried out to assess emissions in relation to this BAT-AEL

* When a fabric filter is not applicable, the upper end of the range is $10mg/Nm^3$

4. Conclusions

The BAT Assessment has highlighted those proposals are generally compliant with indicative BAT.

The function of a building is to control fugitive emissions arising from waste storage and treatment processes whilst preventing waste material destined for recycling from degrading. Whilst all waste treatment will be carried out within a dedicated building, the east section is designed to operate with the doors open. The waste treatment activities most likely to generate dust i.e. shredding and screening of bulky waste will be carried out in the west section of the building which benefits from sealing speed doors and a dust extraction and abatement system.

The east section of the building is used for Directly Associated Activities to the main listed activity, such as baling of paper, plastics and cardboard, shredding of confidential paper and compression of polystyrene which have been deemed less likely to generate dust and noise emissions. The additional control measures in place for control fugitive emissions are detailed below:

There is a low risk of odour as no biodegradable or odourous wastes will be accepted onto site.

There will be a daily walk around and litter pick as part of the Daily Site Inspection. If litter reaches the site perimeter it is likely to be caught within the landscaping plants or the mesh netting.

Noise reduction measures include:

- the operation of the shredder and the screener within an enclosed section of the building; and
- noise insulation on the output shoots from the overband magnet and the eddy current separator.

The guidance states that any deviation from BAT must be accompanied by a justification. Justifications are provided above for the consideration of the Environment Agency as part of the permit application determination process.

Site Plans

Permitted Boundary & Emission Point Plan:

1428-SYM-00-GF-DR-A-0304-P02

Site Layout Plans:

Site Layout - 1428-SYM-00-GF-DR-A-0301-P05

Site Plan – Fire Detection and Suppression - 1428-SYM-00-GF-DR-A-0306-P01

Site Plan Hydrants, Hose Points & Emission Points - 1428-SYM-00-GF-DR-A-0305-P01

Site Drainage Plans:

113397-XX-XX-DR-D-0005 _F Proposed Drainage (Sheet 1 of 3)

113397-XX-XX-DR-D-0006 _ F Proposed Drainage (Sheet 2 of 3)

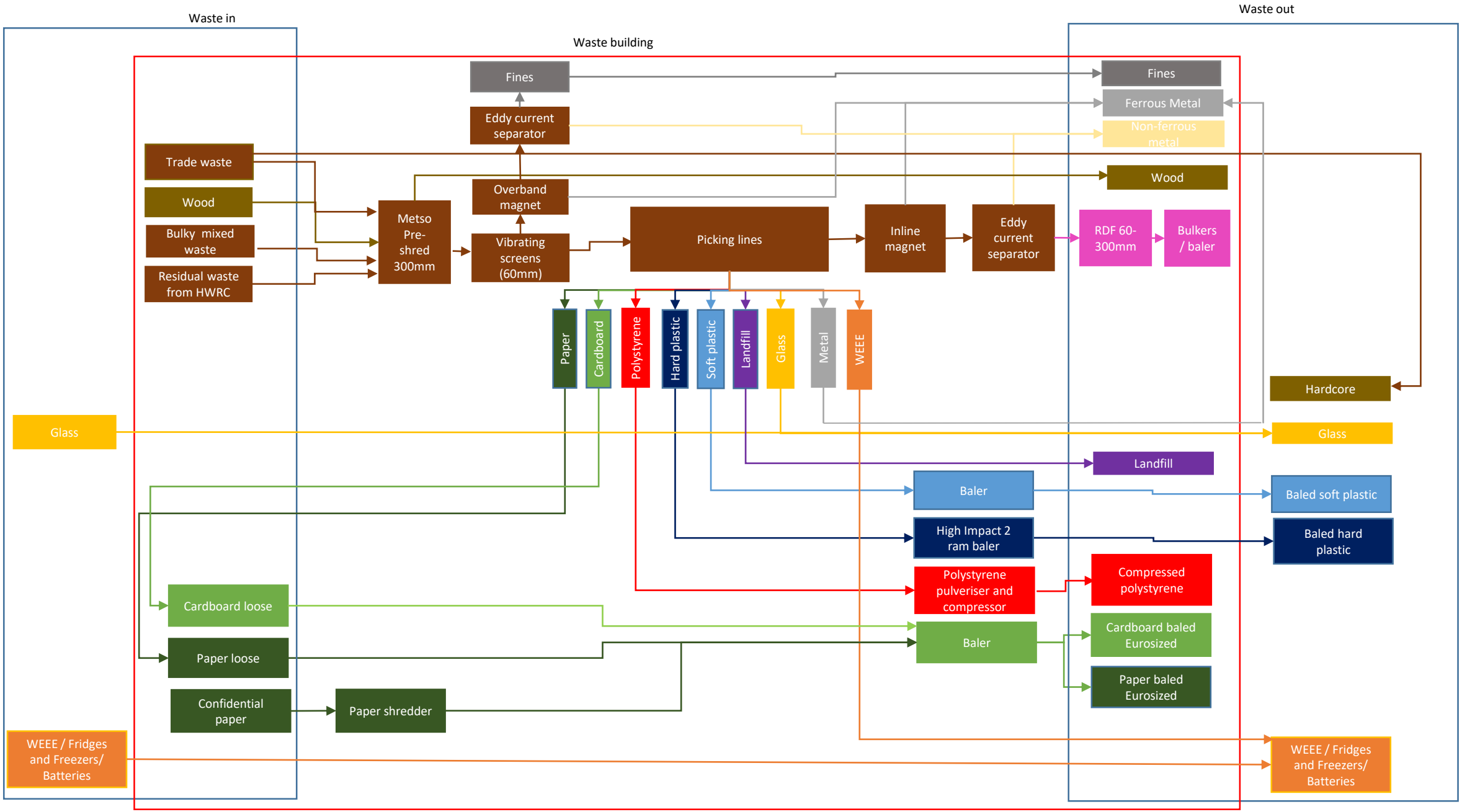
113397-XX-XX-DR-D-0007 _ E Proposed Drainage (Sheet 3 of 3)

Receptor Plan (1km):

1428-SYM-00-XX-DR-A-0307-P01

(1428 - SYM - 00 - GF - DR - A – 0305 - P01) - area designed to flood

Appendix A – Process Flow Diagram

Ling Road MRF – Process Flow Diagram, V2.0, June 2021

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