Appropriate Measures Assessment

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For: Ringway Infrastructure Services Ltd

Site: Newport Pagnall

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Quality Assurance

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Contents

1. Introduction

Ringway Infrastructure Services Ltd (**the Operator**) has instructed Arthian Ltd to prepare an application to obtain an Environmental Permit from the Environment Agency for the storage and treatment (by dewatering only) of road-sweepings/ gully waste from their M1 service contract.

The Operator, Ringway Infrastructure Services Ltd (Ringway) operates a maintenance contract on behalf of National Highways covering sections of the M1, A5, A1M & A421 in the vicinity of Newport Pagnall Motorway Services (close to post code MK16 8DS).

The storage of waste will be undertaken at National Highways Newport Pagnall depot, Newport Pagnall, next to Newport Pagnall Services at Junction 14/15, M1, Buckinghamshire, MK16 8DS (**the Site**).

Application form Part B4, Table 3 requires consideration of the Technical Standards and 'appropriate measures' which each waste operation will be operated in accordance with.

The following guidance has been consulted in preparing this document:

- Technical guidance for regulated industry sectors: environmental permitting - GOV.UK (www.gov.uk)
- Non-hazardous and inert waste: appropriate measures for permitted facilities, Published 12 July 2001, updated 1 August 2023 – Guidance – GOV.UK (www.gov.uk).

This Assessment refers to the information and documents included in the permit application and the Environmental Management System (EMS). The EMS is a dynamic document that will be updated as necessary throughout the permit's duration.

Table 1 Permitted activities

Activity	Description
A1 – Treatment of Waste	Treatment by gravity separation of water from solid, street-sweepings and gully emptying waste.
Directly Associated Activity	**Description**
Storage of waste	Storage of recovered fractions following treatment prior to despatch off-Site for recovery or disposal.
Discharge to foul sewer.	Discharge of water fraction of street-sweepings/ gully waste water which has been treated by silt trap and hydrocarbon interceptor.

2. Non-hazardous and inert waste: appropriate measures for permitted facilities - General Management Appropriate Measures

2.1 Management System

The Operator will implement and maintain a written Environmental Management System (EMS). The EMS will be proportionate to the activities on-site and will include policies, procedures, and records to control operations, manage risks, and achieve compliance with the permit. The system will be kept up to date and will include regular reviews. The EMS will contain the following:

- Commitment of the management, including senior management;
- An environmental policy that is approved by senior managers and includes the continuous improvement of the facility's environmental performance, pollution risks can be identified and minimised through appropriate measures;
- Planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;
- Implementation of procedures paying particular attention to:
    - Structure and responsibility,
    - Recruitment, training, awareness and competence,
    - Communication,
    - Employee involvement,
    - Documentation,
    - Effective process control,
    - Maintenance programmes,
    - Management of change
    - Emergency preparedness and response,
    - Safeguarding compliance in line with the Site's environmental permit and environmental legislation;
- Checking performance and taking corrective action, paying particular attention to:
    - Monitoring and measurement,
    - Corrective and preventive action,
    - Maintenance of records,
    - Independent (where practicable) internal or external auditing to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;
- Review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
- Following the development of cleaner technologies;

- Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
- Consideration of climate change (include climate change adaptation planning)
- Application of sectoral benchmarking on a regular basis;
- Waste stream management;

- Maintain the following documentation:
  - Inventory of emissions to air and water;
  - Residues management plan;
  - Accident management plan;
  - Site Condition Report
  - Odour management plan;
  - Dust, mud, litter management plan;
  - Climate change risk and adaptation plan
  - Schedule for inspection and maintenance for all pollution control infrastructure including:
    - Impermeable surfacing and drainage system
    - Duct's/ pipework of abatement systems.
- Document control procedure setting out how and when procedures will be reviewed
- Confirm physical capacity limits for storage and handling, and residence times

2.2 Staff competence

1. The Site will have a Certificate of Technical Competence (COTC) holder in place with an appropriate level of COTC award.

2. The Site will be accessible 24 hours a day. Site will be staffed when operating.

3. The construction of the bay has been designed and constructed by suitably trained engineers.

4. Site staff will be trained and instructed in procedures relevant to their role and will be aware of the requirements of the environmental permit and environmental management system. The Site will be attended by a suitably trained COTC holder for the appropriate amount of time.

5. Staff carrying out waste acceptance checks, including sampling and analysis of waste will be appropriately trained and competent in the following:

- classify and characterise waste properly
- identify whether it is suitable for acceptance at the Site
- manage any loads that do not conform to waste acceptance criteria

2.3 Accident Management Plan

1. The Operator will maintain an Accident Management Plan which will form part of the Environmental Management System. A plan for dealing with any accidents or incidents or near misses is included within the EMS.

2. The Accident Management Plan will consider:

- Waste types and the risks they pose;
- Transferring substances and filling of containers
- Preventing incompatible substances coming into contact with each other
- Failure of plant and equipment for example storage tanks 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 of abatement systems;
- 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, loss of power

3. The Accident Management Plan sets out the roles and responsibilities of the staff involved in managing accidents. Clear guidance is provided on how to manage each accident scenario for example as a result of a spillage of potentially polluting liquid, likelihood, consequences, overall significance and measures to prevent or limit risk of occurrence.

4. The Accident Management Plan considers the scale and nature of the hazards proposed by the activity alongside risks to nearby receptors.

5. The Accident Management Plan will identify the roles and responsibilities of the staff involved in managing accidents, providing clear guidance on how to manage each accident scenario, for example as a result of a spillage of a potentially polluting liquid.

6. A suitably trained facility employee will be available at all times to act as an emergency coordinator and take lead responsibility for implementing the Accident Management Plan.

7. All employees will be effectively trained so they can perform their duties effectively and safely and know how to respond to an emergency.

8. The Accident Management Plan includes:

- How to communicate with relevant authorities, emergency services and neighbours (as appropriate) before, during and after and accident.

- Implementation of emergency procedures, including for safe plant shutdown and site evacuation (where appropriate).
- Implementation of post-accident procedures that include carrying out an assessment of the harm an accident may have caused and the remediation actions to take.
- Consideration of the impact of accidents on the function and integrity of plant and equipment.
- 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 (where necessary).

9. Following a flooding event, the integrity of affected plant and equipment will be inspected and assessed, especially infrastructure that may have come into contact with floodwater or groundwater. Tank inspections will utilise non-destructive testing methods to verify their integrity.

Preventing accidental emissions

10. The site will implement Accident Prevention Measures:

11. Contain and route process waters, appropriately route site drainage and spillages.

12. Plan for storm water management. In the event of stormwater, drainage will continue in the usual way. Emissions will comply with the discharge consent for quality and volume. The proposed waste types originate from paved surfaces via street sweepings and gully emptyings – therefore their contact with rainwater does not pose a disproportionate risk over and above any flooding created by unforeseen stormwaters.

13. Any liquids stored temporarily will be checked prior to discharge to confirm they comply with any discharge limits. Where they do not, liquids will be tankered off-site to a suitably permitted facility.

14. A spill procedure will be implemented as part of the EMS to minimise the risk of an accidental spill entering watercourses or sewers or contaminating land.

15. The site does not accept combustible waste and so taking account of firefighting water flows is not appropriate.

16. Accidental emissions from overflows of the storage bay has been considered. The area in front of the storage bay will form an overflow area. A surface water gully will be capped off and re-routed back to foul sewer via the silt-trap and interceptor.

Security

17. The Site is located within a fully enclosed site with palisade fencing and closed gates with authorised entry only. Full enclosure is not warranted for the risk of the activities, however they will serve to prevent:

- Damage to equipment
- Theft
- Illicit dumping and fly-tipping
- Arson.

The wider site shares access with National Highways depot and office, which is accessible 24 hours. Consequently, it is also served by lighting, and CCTV.

Fire prevention

18. The Site does not handle combustible waste and so a fire prevention plan is not required.

Other accident prevention measures

19. Maintaining plant control via alarms, trips and interlocks, automatic control systems and tank level readings are considered to be appropriate for waste treatment sites in general. There is no plant to which automatic control would be applied and so this measure is considered not to apply.

20. The following measures are in place to prevent accidents on site:

- Plant will be maintained in a good state through a preventive maintenance programme and a control and testing programme.
- implement procedures to avoid incidents due to poor communication between operating staff – during shift changes and following maintenance or other engineering work.
- All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These documents will form part of the site's EMS.

Records

21. The site will maintain records of accidents, incidents and near misses. Investigations into accidents, incidents, near misses and abnormal events will be undertaken to prevent recurrence.

The only substance to be stored on Site will be the authorised waste. Consequently, an inventory of substances kept on Site will not be necessary.

22. The site will provide immediate notification to Environment Agency of significant events, such as:

- a malfunction
- a breakdown or failure
- an accident
- emission of a substance not controlled by an emissions limit
- breach of an emissions limit

2.4 Contingency plan and procedures

1. The Site will maintain a Site contingency plan. This will include information on how permit conditions and operating procedures will be complied with during maintenance or shutdown, to:

- Not exceed limits in permit
- Continue to apply appropriate measures for storing and handling waste
- Stop accepting waste if there is not enough capacity to clearly recovery or disposal of that waste.

2. The contingency plan includes provisions and procedures to ensure the site:

- Does not exceed storage limits in the permit and applies appropriate measures for storing and handling waste during contingency circumstances;
- Stops accepting waste, unless there is a clearly defined method of recovery or disposal and enough permitted storage capacity;

- As far as possible, know in advance about any planned shutdowns at waste management facilities where waste is sent.

3. Customers will be made aware of the contingency plan, and of the circumstances in which waste would not be accepted.

4. It has been considered whether sites or companies which are relied on:

- Can take the waste at short notice; and
- Are authorised to do so in the quantities and types likely to be needed – in addition to carrying out their existing activities

5. Where circumstances mean that the site could exceed the permitted storage limits or compromise storage procedures, alternative disposal or recovery options will be evaluated. Disposal or recovery options based on extra cost or geographical distance will not be discounted.

6. Unauthorised capacity has not been included in the contingency plan.

Contingency - treatment

7. The contingency plan and management procedures:

- Identify known or predictable malfunctions associated with your technology and the procedures, spare parts, tools and expertise needed to deal with them;
- Include a record of spare parts held, especially critical spares;
- 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
- Make sure the site has the spare parts, tools, and competent staff needed before starting maintenance.

8. The site do not produce end-of-waste material.

9. The EMS system developed for this proposed variation includes procedures for auditing performance against all contingency measures and reporting these audit results to the site manager.

Facility Decommissioning

The only equipment associated with the Site are the concrete bay and pipework to foul sewer. These will be decontaminated. Removal from site may not be required.

1. The Site are committed to preparing a decommissioning plan for to minimise risks during later decommissioning.

- Plant will be decommissioned without causing pollution; and
- The site will be returned to a satisfactory condition.

4. The decommissioning plan the following details:

- That pipelines will be flushed and that they will be emptied of any potentially harmful contents;

- Site plans showing the location of all underground pipes;
- Dismantling of the storage bay need not be required, as being a storage bay, it may serve a follow-on purpose. But the Site will be cleared of all waste and left in a suitable state for the end use.
- Where evidence suggests damage to the site surface, soil testing may be undertaken in accordance with permit surrender requirements, to confirm that the site activities have not caused any pollution.
- Confirm all waste has been removed from the Site once activities have definitively stopped, to avoid any pollution risk and to return the site of operation to a satisfactory state; and
- The clearing of deposited residues, waste and any contamination resulting from the waste treatment activities.

3. Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures

The site manages contracts on behalf of National Highways, resulting in a consistent and source for the singular waste code.

3.1 Waste pre-acceptance

Pre-acceptance checks begin with the initial service request from National Highways, aligned with the regular cleaning schedule. The client specifies whether the service involves attending a spill. In such cases, the operator transports the collected waste to a suitably permitted facility for recovery or disposal.

Only street sweepings and gully waste generated through routine maintenance are accepted at the site

1. Pre-acceptance procedures must follow a risk-based approach, considering:

- the source and nature of the waste – the source of the waste will always be well-defined – carriageways. The nature of the waste may be solid (road sweepings) or liquid/sludge (gully 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) – there will be no prior waste holders.

2. The Site will not routinely accept waste on an ad-hoc basis. Waste will be received from its own vehicles and operatives, serving lengths of carriageway which they have been contracted to cleanse.

3. All waste will be coded as EWC 20 03 03 Street sweepings and gully waste. If the load in question is deemed to be contaminated with oils or other substances, it will be taken to another facility.

4. All loads will be subject to a visual pre-acceptance check, prior to deposit within the bay.

5. The following information will be obtained in writing or electronic form:

- waste producer details – incl. organisation name, address and contact details
- description of the waste
- waste classification code (also referred to as a List of Waste (LoW) or European Waste Classification code
- the source of the waste (the producer's business and the specific process that has created the waste)
- information on the nature and variability of the waste production process
- information about the history of the producer 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 and whether it is likely to be odorous
- an estimate of the quantity you expect to receive in each load and in a year

For mirror entry LoW codes (as defined in WM3), evidence must be kept that you have made an assessment of the waste to assign the relevant mirror entry code. The waste to be accepted to Site is not a mirror entry code.

6. Sample information is not required for the waste as the origin of the waste is reliably understood and it clearly shows that the waste is non-hazardous. A visual assessment alone will not be enough to assess whether mirror entry waste is hazardous or not. The waste to be accepted is not a mirror entry code.

7. The pre-acceptance information will be verified by contacting or visiting the site of production. Staff involved with the cleansing process will be contacted to confirm the waste is as described.

8. Any analysis of samples will be carried out by laboratories who are UKAS or MCERTs accredited.

9. Waste will be accepted and stored in accordance with the Permit conditions.

10. Waste pre-acceptance records for wastes accepted to Site, will be kept for at least 2 years (or 3 years for any wastes determined to be hazardous and rejected from Site).

11. The information required at pre-acceptance will be reassessed 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, waste will be reassessed for each new contract.

12. All waste will be checked for the following at acceptance stage:

- Visual – no contamination (e.g. oil, litter)
- Physical – waste will only be received, if there is capacity for that waste type liquid/sludge/ solid.
- Odour – wastes which could be deemed offensive to adjacent users of the services will not be accepted.

Unsuitable wastes will be rejected from site in accordance with the waste rejection procedure. This rejection will be recorded.

3.2 Waste Acceptance

1. The operator will implement the Waste Acceptance Procedure for all waste arriving at the Site.

2. The Waste Acceptance Procedure is developed in accordance with the relative risks posed, including:

- 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 - none
- knowledge about the previous waste holder(s) – well understood and confirmed at pre-application stage.

3. If the Site has insufficient capacity for the waste, the incoming waste will not be accepted and directed to the nearest suitable facility instead. Capacity will be managed by the site office and can be visually assessed by looking at the available space in the bay, which is visible from the site office.

4. All waste will be visually checked upon arrival at site.

Streetsweeping waste will be deposited in the bay and visually inspected.

Gully waste arriving in tankers – some of the load will be discharged into an inspection container for inspection. Once confirmed that the waste is as expected and free from contamination (e.g. oil), it will be deposited within the bay.

5. All transfer documents will be verified, and any discrepancies resolved. Any non-conformances will be recorded. Any incomplete details will be rectified.

6. Waste will be rejected if it:

- Contains visible oil contamination e.g. from a spill (incidental, adsorbed, aged quantities of oil residue from the roadside is acceptable, as this will be removed by the hydrocarbon interceptor).
- Is malodorous, likely to cause offence.
- Does not match the description of the street sweepings of gully waste

Steps will be taken to prevent acceptance of any rejected waste, where possible.

7. If hazardous waste is rejected, the Waste Rejection Procedure will be followed.

8. The site does not have a weighbridge, however the volume of each delivery container is known. Where a load capacity is unknown, the maximum load capacity will be reported. The volume of waste accepted to site will be recorded.

9. All staff carrying out waste acceptance checks will be trained to identify and manage any non-conformances in the loads received, to comply with Duty of Care and the Permit.

10. The Waste Acceptance Procedure confirms that staff must watch waste being unloaded, so waste can be quarantined if necessary.

11. Offloading and reception areas have an impermeable surface with self-contained drainage, to prevent any potentially polluting liquid from escaping off site.

3.3 Quarantine

1. Your facility must have a dedicated waste quarantine area or areas which you use to temporarily store waste being rejected, or non-conforming waste whilst it is being assessed. Quarantine areas must have impermeable surface with self-contained drainage if there is a risk of contaminated runoff from the quarantined waste.

1. The Site will maintain a quarantine area which will comprise a dedicated container/skip for containing unauthorised waste. The container will be located within the storage bay itself or on concrete surfacing draining to the foul sewer.

2. Where there is a risk of fugitive emissions from quarantined waste you must store it in closed or covered containers or within a building.

2. Where wastes are not suitable for acceptance to site, they will be rejected in the enclosed container in which they arrived, where possible. Where this is not possible and wastes are instead quarantined. Wastes will be stored appropriately in the quarantine container. In the event of risk of fugitive emission from quarantined waste, the quarantined waste will be stored in covered containers or stored within the bay with cover.

3. Quarantine storage must be separate from all other storage and clearly marked as a quarantine area.

3. The Quarantine area will comprise a container into which waste identified as non-confirming will be decanted, in the event that it cannot be reloaded and returned to waste producer or sent to a suitably permitted site.

4. You should store the waste in quarantine in closed containers or cover it to prevent emissions if appropriate. For example, you should sheet quarantined contaminated soil or store it in a covered skip to prevent rainfall or wind from mobilising pollutants.

4. Where possible, non-conforming waste will not enter site will not be unloaded / reloaded and rejected from site immediately. Where this is not possible, non-conforming waste will be stored in the quarantine container which will be covered if necessary.

5. You must have written procedures for dealing with wastes held in quarantine, including a maximum storage volume. The maximum storage time must take account of the potential for odour generation, pest infestation and storage conditions. If the waste is infested or odorous you must remove it within 24 hours or sooner.

5. Non-confirming wastes will be handled in accordance with the Waste Rejection Procedure. Non-confirming waste will be removed from site immediately/ within 24 hours, where possible.

3.4 Waste tracking

1. You should use an electronic or equivalent system to hold up-to-date information about the available capacity of different parts of your facility, for example reception, quarantine, treatment and storage areas. If you do not have an electronic system you still need to hold the equivalent level of information. You should use a pre-booking system to make sure that you have enough waste storage and process capacity for the incoming acceptable waste.

Your electronic or equivalent 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.

1. A record of incoming waste will be maintained.

All waste collections are scheduled by the Operator and the resulting waste collections can be adequately planned in advance, meaning that Site storage capacity can be planned, reducing the risk of any storage capacity issues.

Waste records will be maintained electronically, where possible. Waste records will include the following information, pre-acceptance, acceptance, any non-conformance/rejection information, storage, any repackaging, treatment, removal from Site.

2. 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*
- *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*

2. There are no end-of-waste products produced on Site.

Waste records will include the following information:

- date of arrival
- the original producer's details (or unique identifier) (National Highways contract details)
- a unique reference number
- 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

3. The electronic (or equivalent) system must be able to report for each of LoW 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*

3. The Site accepts a single waste code.

The waste tracking system will record:

- the quantity of waste present on site at any one time.
- the quantity of waste awaiting onward transfer.
- The waste storage limits from permit and management system
- the location of stored waste.
- the length of time the waste has been on site compared with the limits in your management system and permit

4. The electronic (or equivalent) 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.

4. There are no end-of-waste products produced on Site.

5. You must store back-up copies of records off site. These records must be readily accessible in an emergency.

5. Electronically-stored records will be backed up off-site, e.g. in cloud storage. Cloud storage will allow for access in an emergency.

6. 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.

6. Waste acceptance records will be kept for a minimum of 2 years following removal from Site.

Hazardous waste consignment notes for any identified hazardous wastes rejected from Site, will be kept for a minimum of 3 years.

4. Waste storage

1. 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.

1. Waste will be stored in accordance with the waste storage and handling procedure.

2. You must store waste in locations that minimise the unnecessary handling of waste.

2. Waste will be stored in the waste storage bay/ quarantine area only. Waste will only be handled during removal from site or if it is identified to be non-conforming.

3. Waste handling must be carried out by competent staff using appropriate equipment. You must use mechanical unloading technologies where it is possible, safe and practicable to do so.

3. Waste will be unloaded from the delivery vehicles using their waste discharge and tipping controls.

All staff will be suitably trained in operation of the plant and in waste handling awareness.

4. 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.

4. Waste will be stored securely within the storage bay. The storage bay is located within an enclosed site with gated access and 24hr presence and CCTC security.

5. 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:

- *cubic metres or tonnage*
- *numbers of skips or other containers*
- *maximum tank or vessel capacities*

5. The site will only store waste to suit the capacity of the storage bay. This volume of waste stored on site will not exceed 180 m^3.

6. You should clearly mark all waste storage areas and provide signs indicating the type of waste stored there.

6. Waste is stored in the waste storage bay. The quarantine area will be clearly marked as such.

7. 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*

7. Waste will be treated (gravity solid/water separation) upon deposit. Solid waste will be removed from Site promptly, following treatment (anticipated to be weekly). The bay will be fully cleared in its entirety, each time waste is removed from Site and so it will not be necessary to prioritise based on type/age on arrival.

8. 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.

8. Wastes posing a risk of pollution will be rejected from Site and removed as soon as possible. The Site will follow a first-in, first-out (FIFO) principle. However, since the entire bay is cleared each time waste is removed, this process naturally results in FIFO being applied.

9. You must minimise refuse derived fuel (RDF) and solid recovered fuel (SRF) storage durations. You must implement an auditable bale identification system so that you can remove bales in date order.

9. The Site does not accept of treat refuse derived fuel (RDF) and solid recovered fuel (SRF).

10. You must securely wrap bales of RDF and SRF with high-density polyethylene (HDPE) membrane or equivalent. This is to prevent water entering, access by pests and odour release. You should inspect bales regularly and rewrap any that are damaged. If they are wrapped securely, you can store them outside (unless your permit forbids this). If you store bales outside, your fire prevention plan must manage the risks from solar heating during hot weather.

9. The Site does not accept of treat refuse derived fuel (RDF) and solid recovered fuel (SRF).

11. You must thoroughly clean storage bays and containers on a regular basis to prevent the build-up of aging waste, which will be a source of odour and attract vermin.

11. The waste storage bay will be emptied regularly, which is anticipated to be weekly.

Where waste have been particularly muddy/messy, the bay will be cleaned. Regular clearing of the storage bay and surrounding site surface will be carried out daily and weekly when the storage bay is emptied. More comprehensive cleaning activities will be undertaken as required to prevent any build-up of waste which could produce odour or attract vermin.

12. 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*
- *with caps, valves and bungs in place and secure*
- *within the manufacturer's designed lifespan, particularly for plastic containers*

12. The waste storage bay has been designed and constructed to contain the wastes proposed.

The container used for the quarantine area will be maintained in a suitable condition, to contain the quarantined waste, not be corroded, have a covering which fits (if required).

13. 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 clean up and log any spillages of waste.

13. All storage areas will be inspected daily. These checks will be noted in the site diary or inspection checklists. Waste storage areas can be observed from the site office.

Segregation

1. You should keep different types of waste segregated if contamination would inhibit the recovery of the waste.

1. The Site accepts a single waste code only. Segregation of waste is not required. Unauthorised or unacceptable wastes will be kept separate from acceptable wastes. Unacceptable wastes will not be unloaded or deposited in the quarantine area.

2. Where paper, plastic, metal or glass have been collected separately, they must not be mixed with other waste or material. This duty applies where you are required to keep wastes separate and to help with or improve waste recovery.

2. The Site accepts a single waste code only. Paper, plastic, metal and glass are not accepted at the site. Segregation of waste is not required.

5. Waste treatment

1. 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.

1. Water is separated from the solid fraction of the waste. The treatment of waste at the Site prevents transport of volumes of waste over great distances by tanker. It also streamlines maintenance services for the nation's road networks. Emissions to sewer are controlled via the waste acceptance procedures and the sewer pre-treatment infrastructure (silt trap and hydrocarbon interceptor). The silt trap and hydrocarbon interceptor will be inspected daily at the beginning and the ongoing frequency decided upon thereafter.

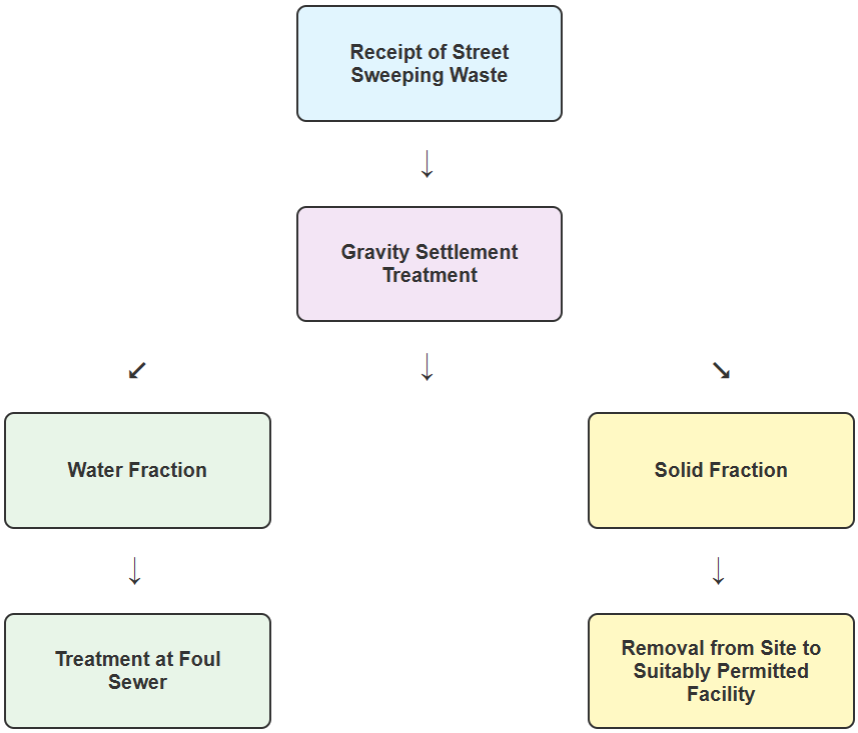
2. You must prevent unwanted or unsuitable material from entering subsequent waste treatment processes.

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*
- *diagrams of the main plant items where they have environmental relevance, for example, storage, tanks, treatment and abatement plant design*
- *details of physical processes for example separation, compaction, shredding, heating, cooling or washing*
- *an equipment inventory, detailing plant type and design parameters*
- *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*
- *a summary of operating and maintenance procedures*

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 based on the type and amount of wastes processed.

The process flow for Site activities is shown in the flow chart below.



The site accepts a single waste code only.

The Site implements a procedure for unloading the waste and subsequent waste treatment i.e. separation of solid and liquid fractions. The facility will be subjected to regular inspections, anticipated to be monthly.

All plant required for the safe operation of the site are maintained in accordance with a regular maintenance schedule. The Site is maintained in a tidy state.

3. 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*
- *momentary stoppages*
- *shutdown*

The Operator will follow the Accident Management Plan in the event of abnormal event. If the abnormal event is not addressed within the Accident Management Plan, the Operator will deal with the event without causing environmental harm. The Accident Management Plan will be updated following the event.

Soils and inert waste

1. Soil and aggregate washing is a physico-chemical treatment (not a separation or sorting activity) and you must categorise the outputs as set out in WM3.

1. The Site does not accept soils.

As pre-application advice stated that the water/solid separation activity was considered to be physical/chemical treatment, outputs will be categorised according to WM3, prior to removal from Site.

Waste treatment output including fines

1. 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 If you do not, you may breach your Duty of Care for waste and commit an offence under the Environmental Protection Act 1990.

This is particularly important for fines arising from shredding and trommelling processes, which generally:

- *require disposal at cost*
- *contain a range of contaminants*
- *are likely to be subject to a mirror entry code in the LoW, for example 19 12 11* versus 19 12 12*

1. The Site accepts a single waste code. Outgoing waste is not considered to materially change and the outgoing waste code is likely to remain unchanged. Outgoing waste will be classified in accordance with WM3.

2. Any hazardous waste taken from your facility must be consigned following our guidance Dispose of hazardous waste.

2. Hazardous waste will be consigned to an appropriately permitted facility, using the appropriate documentation.

3. 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 (resource framework), 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.

3. There will be no non-waste material stored on Site. In the event that non-waste material is to be stored on site it will be stored in such a way as to prevent pollution.

Waste treatment for landfill

1. If you are handling or treating waste before you send it to landfill follow our guidance Dispose of waste to landfill.

1. Any outgoing waste to landfill will be disposed of in accordance with the guidance Dispose of waste to landfill.

- Waste will be pre-treated

- Waste will be classified as hazardous or non-hazardous in accordance with WM3.

- Waste will be characterised for disposal into the suitable category of landfill, including testing for organic content and leachability, ensuring compliance with Waste Acceptance Criteria (WAC). This informs routing to inert, non-hazardous, or hazardous cells.

- Transfer waste with suitable waste transfer note or consignment note.

- Provide necessary Duty of care information to treatment operator

6. Emissions Control

6.1 Enclosure within buildings

1. Enclosing activities within buildings can be an appropriate measure for preventing and minimising emissions of pollution, given that an appropriately designed building will reduce a range of types of pollutants, in particular, noise, dust and odour. A partially enclosed building may be an appropriate measure on its own, or together with other appropriate measures, depending on the site-specific circumstances.

1. Waste types to be accepted will be wet and do not pose a significant risk of fugitive emissions. Waste volumes to be stored are small (180 m^3). It is considered that storage within a building is not required for this activity.

2. If your waste treatment activities are likely to cause (or are causing) significant pollution at sensitive receptors which cannot be addressed by alternative measures, then you must carry out that waste treatment activity within an enclosed building.

2. Treatment activities comprise dewatering only (passive). Emissions from treatment activities on site which cause significant pollution at sensitive receptors are considered unlikely.

3. You must also carry out non-treatment activities, such as storing and transferring waste (including loading and unloading) in enclosed buildings if these activities are likely to cause (or are causing) significant pollution at sensitive receptors which cannot be addressed by alternative measures.

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 practicable and covered with fast-acting doors which default to the closed position. You must keep its windows closed unless you need to open them for ventilation. Dirty (process contaminated) air must pass through appropriate abatement before being emitted from the building.

3. Emissions from the storage of waste on site which cause significant pollution at sensitive receptors are considered unlikely.

4. Material transfer and storage systems and equipment (for example conveyors, hoppers, containers and tanks) can extend outside the enclosed building so long as they are also fully enclosed.

4. There are no mechanical treatment infrastructure in place on site.

5. You must regularly assess your enclosed 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 and where potential faults in building integrity are likely to be causing pollution such as odour.

5. No building is proposed.

6. 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 unacceptable noise. The engineer designing the ventilation system must be appropriately qualified. To validate the size 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*

6. No building is proposed.

7. The air inside the enclosed 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*

7. No building is proposed.

8. 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.

8. No building is proposed.

9. You must implement measures to control 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 fugitive emissions may be required in some cases, for example installing an airlock entry system.

9. No building is proposed.

10. 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.

10. No building is proposed.

6.2 Point source emissions to air (channelled emissions)

1. 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.

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.

1. There are no channelled emissions to air.

2. You must make an assessment of the fate and impact of the substances emitted to air, following the Environment Agency's risk assessment guidance.

2. There are no channelled emissions to air.

3. 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. The appropriate combination of abatement techniques would include one of more of:

- *adsorption*
- *biofiltration, biotrickling or bioscrubbing*
- *cyclone*
- *fabric filter*
- *water injection (into a shredder)*

3. There are no channelled emissions to air.

4. You must assess and design vent and stack locations and heights to make sure dispersion capability is adequate and noise 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.

4. There are no channelled emissions to air.

5. Where monitoring is required, including for odour, you must install suitable monitoring points which meet the sampling standard for the relevant pollutants.

5. There are no channelled emissions to air.

6. You must have procedures to make sure that you correctly operate, monitor and maintain abatement equipment.

6. There are no channelled emissions to air.

7. Your monitoring should demonstrate the effectiveness of the abatement, so that you can take preventative or corrective action as necessary.

7. There are no channelled emissions to air.

8. 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.

8. There are no channelled emissions to air.

9. You should design and operate abatement systems to minimise water vapour plumes.

9. There are no channelled emissions to air.

6.3 Fugitive emissions to air

1. You must use appropriate measures to prevent and minimise fugitive emissions to air, including dust, mud and litter, odour and noise and vibration.

1. Waste types to be accepted will be wet and do not pose a significant risk of fugitive emissions. Waste volumes to be stored are small (180 m^3). It is considered that risk of fugitive emissions are low. All waste will be handled and stored to prevent fugitive emissions from site via Waste Acceptance Procedures.

2. 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*
- *Where necessary to prevent fugitive emissions to air from the storage or handling of wastes, you should use a combination of the following measures:*
    - *use fully enclosed material transfer and storage systems and equipment outside buildings, for example conveyors, hoppers, containers, tanks and skips*
    - *store and handle the waste within a suitably enclosed area (for example bays), a building or enclosed building*
    - *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*

2. Waste acceptance procedures will be used to prevent fugitive emissions to air. Waste will be stored for short durations only. In the event of any fugitive emissions, these will be controlled and/or the waste removed from site. Due to the small volumes and short storage durations, enclosure within a building is not considered necessary.

3. 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*

3. The Site will employ a regular maintenance programme for all areas of waste storage and treatment, including storage bay, quarantine area and interceptor. Waste storage areas will be cleaned monthly. Interceptor will be inspected on a monthly schedule. Following operation, if this schedule requires adjustment (more or less frequent, this will be enacted to prevent fugitive emissions to sewer).

4. 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. If you have a weather station you should position it carefully, for example not placing it in between buildings. There is guidance in the World Meteorological Organization's Guide to Meteorological Instruments and Methods of Observation.

4. Weather conditions will be noted and may inform preventative actions such as removal of waste from site or covering of material to prevent fugitive emissions.

5. Relying 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 at source.

- *Other measures for dust, mud and litter*

5. Waste will be stored in container or storage bay which shields any stored waste from the wind. Waste volumes to be stored are small and waste will be removed from site regularly meaning less opportunity for materials to become entrained by wind.

6. 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.

6. Waste activities are not likely to produce dust and particulates due to the wet nature of the waste.

7. 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 activity is done outdoors. You should not rely on fences and screens at the perimeter of your facility to stop litter escaping.

7. Acceptable waste codes have a low litter potential. Incident litter will be hand-picked upon deposit in the bay and disposed of appropriately.

8. 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.

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.

8. Dust and mud are not considered to pose significant risk of escape such that water suppression must be employed regularly. It is considered that the road sweepers depositing waste on the site will sweep the site if required. This may be dry or wet sweeping depending on the need. Any water used will be siphoned and may be deposited within the waste storage bay, with water draining to foul sewer.

Other measures for odour

9. If your activities are likely to produce odour pollution at sensitive receptors, or such pollution has been substantiated, you must implement and regularly review an odour management plan following our guidance, which includes H4 Odour management. Your odour management plan must explain how you will prevent and minimise odorous emissions from your facility.

9. Activity unlikely to produce odour pollution.

10. You must reject waste that is highly odorous as part of your pre-acceptance and waste acceptance procedures. This is unless you can handle and treat these wastes within an enclosed building with appropriate odour control measures, including extraction via odour abatement. Otherwise, you should talk to the waste supplier to stop it happening again. You should avoid receiving aged waste, for example by refusing to accept waste from other transfer stations that do not have strict inventory controls and documented holding times.

10. Activity unlikely to produce odour pollution.

11. You must make sure that odorous waste arrives at and leaves your facility in covered or enclosed vehicles. Mesh covers are not adequate to control odour. You should minimise how long potentially odorous waste is kept at your facility, in particular under anaerobic conditions. Making smaller stockpiles increases natural aeration, reducing the risk of anaerobic biodegradation which can cause odour.

11. Activity unlikely to produce odour pollution.

12. You should wash empty vehicles before they leave your facility, to remove any residues which may be or become odorous. You must make sure the run-off from this process is contained and lawfully discharged.

12. Activity unlikely to produce odour pollution.

13. You should not allow contaminated liquids to pool for long periods of time, as they can be a source of odour. If you do not have a drainage system inside the building that can collect the leachate or dirty water, then you will need other appropriate measures. You should take action to avoid ponding or pooling. Industrial vacuum cleaners can be used to suck up liquids. You should clean any spillages immediately.

13. Activity unlikely to produce odour pollution. No liquids will be stored or pooled on site.

14. You must cover odorous or potentially odorous waters or liquids or keep them in enclosed tanks or containers.

14. Waste types and activity unlikely to produce odour pollution.

15. Using masking agents (for example dry nano systems, ozone systems and ionisation systems) is a way of attempting to disguise an odour problem. If you understand and process wastes efficiently then you will not need to use masking agents. We do not consider this technology an appropriate measure.

15. Activity unlikely to produce odour pollution.

Other measures for noise and vibration

16. 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. Follow our guidance H3 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.

16. Activity unlikely to produce noise or vibration pollution.

17. 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'.

17. N/a. Activity unlikely to produce noise or vibration pollution.

18. 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'.

18. N/a. Activity unlikely to produce noise or vibration pollution.

6.4 Point source emissions to water (including sewer)

1. 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.

1. Untreated gully emptyings sample have been sampled and analysed to ascertain the typical contents therein. The results from this analysis is presented in 316660 RP03 – H1 Assessment for Water Emissions which confirms that, there are no significant substances for concern. The effluent will be pre-treated via a silt-trap and hydrocarbon interceptor prior to discharge to sewer.

It is proposed that, subject to Environment Agency agreement, that repeat rounds of analysis are undertaken for the same suite of analysis to confirm the outcome of the H1 Assessment.

2. You must assess the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance.

2. An inventory of anticipated emissions to sewer has been undertaken (316660 RP03 – H1 Assessment for Water Emissions). The following list of substances were sampled for in untreated effluent to conservatively assess if any of the elements are contained within. All of the below were detected in too small a quantity to be considered relevant or which following foul treatment will pose no risk to controlled waters at the outlet.

Substance/Element
Arsenic
Cadmium
Dissolved Copper
Dissolved Lead
Dissolved Mercury
Dissolved Nickel
Dissolved Zinc
Benzene
Toluene
Xylene
Hexavalent Chromium
Total Dissolved Chromium (III)
Boron
Naphthalene
Benzo(a)pyrene
Benzo(g,h,i)-perylene
Benzo(b)-fluor-anthene

Substance/Element
Benzo(k)-fluor-anthene
2-Chlorophenol
2,4-Dichlorophenol
4-Chloro-3-methylphenol
Phenol
Benzylbutyl phthalate
Dibutyl phthalate
Dioctyl phthalate
Diethyl phthalate
Dimethyl phthalate
Dichlorobenzene
Trichloro-benzenes
Hexachlorobenzene
Hexachlorobutadiene
Polyaromatic hydrocarbons (PAH)*

3. Discharges to water or sewer must comply with the conditions of an environmental permit and a trade effluent consent.

3. The discharge to sewer will comply with the conditions of the trade effluent consent (once granted) and the environmental permit (once granted).

4. 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*
- *If you need to treat waste water before discharge or disposal, you must use appropriate treatment techniques. An appropriate combination of treatment techniques, for example, could include silt or solids removal and using an oil separator to manage site drainage.*

4. All water discharged from site will be discharged via the silt-trap and hydrocarbon interceptor.

5. You must segregate uncontaminated water streams (for example clean runoff from roofs) from those that require treatment.

5. Clean water from site surfaces will continue to drain to surface water sewer gullies on site. Water from rooves is directed to surface water sewer via dedicated gullies.

Potentially contaminated water from the sweepings and gully emptyings will be directed to the foul water gully, which drains via silt trap and hydrocarbon interceptor. The two areas will be separated by suitable kerbing/ ramp.

6. 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.

Clean water from site surfaces will continue to drain to surface water sewer gullies on site. Water from rooves is directed to surface water sewer via dedicated gullies.

Potentially contaminated water from the sweepings and gully emptyings will be directed to the foul water gully, which drains via silt trap and hydrocarbon interceptor. The two areas will be separated by suitable kerbing/ ramp.

6.5 Fugitive emissions to land and water

1. 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.

1. There are no fugitive emissions to land or water from the site.

The site is concrete surfaces with sealed joints. Clean water from clean site surfaces drains to surface water sewer. Effluent from waste storage areas drains to foul sewer via silt trap and hydrocarbon interceptor.

2. 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*

2. The waste storage bay have been appropriately designed for the storage of gully emptyings and street sweepings. The storage bay comprises concrete surround and base with sealed joints, draining to an aco channel drain, then silt trap and hydrocarbon interceptor.

3. Your drainage infrastructure must:

- *prevent incompatible wastes coming into contact with each other*
- *make sure that fire cannot spread*

3. The site will accept one waste type only. Wastes which are identified to not match those acceptable on site will be stored separately in the quarantine container. The quarantine container is separate to the main waste storage bay.

The is no risk of fire associated with the proposed waste types.

4. 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. This includes in the event of an accident, for example a fire.

4. All waste will be stored and treated on impermeable surfacing (concrete) with sealed construction joints.

The proposed waste types do not pose a significant risk of contaminating surface or groundwater. However, the waste will be handled and stored such that it will not pose a nuisance to other users of the vicinity.

It is proposed to separate area in which waste is handled from the other paved areas on site using suitable kerbing/ ramps to prevent flows between the separate drainage routes.

5. 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 CIRIA 736 or an equivalent approved 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*

5. It is not proposed to store liquids on site.

Liquid waste will be inspected in an inspection container. Liquid waste which has been confirmed to meet the acceptance criteria will be discharged to the storage bay and drainage channel on a gradual basis such that liquids are not allowed to accumulate.

Non-confirming wastes will be rejected from site in the sealed delivery vehicle. The quarantine area is considered to be designated for predominately solid waste.

6. 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.

6.

7. 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*

7.

8. 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 (waste or otherwise) that could be harmful to the environment if spilled*

8.

9. 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.

9.

10. 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*
- *You must have appropriate measures to monitor, treat and reuse the water held in the buffer storage before discharging.*

10.

11. 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*
- *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*

11.

12. You must produce and implement a spillage response plan and train staff to follow it and test it.

12.

13. 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.

13.

14. 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.

14.

15. 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.

15.

16. You must make sure your spillage response plan includes information about how to recover, handle and correctly dispose of waste produced from a spillage.

16.

17. You must have a documented inspection and maintenance programme for impermeable surfaces and containment facilities and keep records to demonstrate its implementation.

17.

6.6 Pests

1. 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. We have produced internal guidance for our officers on fly management. Contact us if you would like a copy.

1.

2. 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.

2.

3. Your pest management plan must include procedures for:

- *inspecting for and controlling 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*

3.

7. Emissions and monitoring limits

These are emissions limits and appropriate measures for monitoring emissions to air and water for a regulated facility permitted to store, treat or transfer (or both) non-hazardous and inert waste.

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.

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.

7.1 Emissions to air

1.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*
- *presence of other substances that may affect the waste gas treatment system or plant safety, for example, oxygen, nitrogen, water vapour and dust*

Guidance on monitoring stack emissions is available.

1. N/a. There are no point source emissions to air.

2. 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. There is guidance on developing monitoring strategies for assessing levels of pollutants in the ambient atmosphere and monitoring particulate matter in ambient air around waste facilities.

2. Waste types are wet/damp and pose a low risk of generating dust and particulate pollution at sensitive receptors. No formal monitoring is proposed, though staff will remain vigilant of fugitive emissions as part of their daily checks.

3. 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 PM10. 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. When combined with weather data, dust and particulate monitors can also provide evidence to demonstrate that your facility is not the cause of complaints. You should use a particulate limit of 75 µg/m3 to100 µg/m3 (over a 5 minute average) for PM10 as an initial trigger for action, and reduce this after the system has been in place for some time.

3. Waste types are wet/damp and pose a low risk of dust/particulate pollution at sensitive receptors. It is considered that quantitative monitoring of dust/particulates is not considered to be required for the type and scale of the proposed operation and low risk of emissions.

7.2 Medium combustion plant directive

1. If you operate medium combustion plant or specified generators you must monitor your emissions following the Environment Agency guidance on Monitoring stack emissions: low risk MCPs and specified generators and maintain a record of the type and quantity of fuel used in the plant.

1. N/a. No MCP in operation.

2. If you have a generator that uses natural gas, for example in a boiler, you must comply with the specified generator regulations.

2. N/a. No MCP in operation.

3. You must keep periods of start-up and shut-down for medium combustion plant and specified generators to a minimum. You must notify the Environment Agency of newly installed combustion units before start-up.

3. N/a. No MCP in operation.

4. You must notify the Environment Agency at least 14 days in advance of any planned changes to the medium combustion plant or generator which could affect compliance with any emission limits that apply, this includes notifying us of any significant upgrades.

4. N/a. No MCP in operation.

7.3 Emissions to water and sewer

1. Your facility's emissions inventory must include information about the relevant characteristics of point source emissions to water or sewer, such as:

- *average values and variability of flow, pH and conductivity*
- *average concentration and load values of relevant substances and their variability, for example, chemical oxygen demand (COD) and total organic carbon (TOC), metals, priority substances or micropollutants*
- *data on bio-eliminability, for example, biochemical oxygen demand (BOD), BOD to COD ratio, biological inhibition potential (for example, inhibition of activated sludge)*

1. The effluent quality has been sampled and analysed (see 316660 RP03 - H1 Assessment for Water Emissions). The effluent was sampled for relevant determinands for the waste stream. It is proposed that further samples of the effluent are taken to confirm the outcome of the H1 screening assessment, subject to confirmation with the Environment Agency on sample number and determinands.

2. For relevant emissions to water or sewer identified by the emissions inventory, you must monitor key process parameters (for example, waste water flow, pH, temperature, conductivity or BOD) at appropriate 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*

2. The effluent emissions to sewer will be monitored in accordance with the trade effluent consent (once granted) and the environmental permit (once granted).

It is proposed that the emissions are monitored at the inlet of the treatment process. Samples will be taken from the tanker, prior to discharge into the drain.

8. Process efficiency appropriate measures

These are process efficiency appropriate measures for a regulated facility permitted to store, treat or transfer (or both) non-hazardous and inert waste.

1. For your installations 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

8.1 Energy efficiency (installations only)

1. 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*

1. N/a. The proposed activity will comprise a waste operation.

2. You must regularly review and update your energy efficiency plan as part of your facility's management system.

2. N/a. The proposed activity will comprise a waste operation.

3. 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.

3. N/a. The proposed activity will comprise a waste operation.

4. You must regularly review and update your energy balance record as part of your facility's management system, alongside the energy efficiency plan.

4. N/a. The proposed activity will comprise a waste operation.

5. 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)*
- *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*

5. N/a. The proposed activity will comprise a waste operation.

6. 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)*

6. N/a. The proposed activity will comprise a waste operation.

7. You should implement additional energy efficiency measures at the facility as appropriate, following our guidance.

7. N/a. The proposed activity will comprise a waste operation.

8.2 Raw materials (installations only)

1. 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.

1. N/a. The proposed activity will comprise a waste operation.

2. 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.

2. N/a. The proposed activity will comprise a waste operation.

3. You must justify the continued use of any substance for which there is a less hazardous alternative.

3. N/a. The proposed activity will comprise a waste operation.

4. You must have quality assurance procedures to control the content of raw materials.

4. N/a. The proposed activity will comprise a waste operation.

8.3 Water use (installations only)

1. 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*

1. N/a. The proposed activity will comprise a waste operation.

2. Measures you must take include:

- *implementing a water saving plan (involving establishing water efficiency objectives, flow diagrams and water mass balances)*
- *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*

2. N/a. The proposed activity will comprise a waste operation.

3. You must carry out a regular review of water use (a water efficiency audit) at least every 4 years.

3. N/a. The proposed activity will comprise a waste operation.

4. 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 the reuse, and minimising the use of water*
- *have a timetabled improvement plan for implementing additional water reduction measures*

4. N/a. The proposed activity will comprise a waste operation.

5. 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*
- *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*

5. N/a. The proposed activity will comprise a waste operation.

6. 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.

6. N/a. The proposed activity will comprise a waste operation.

7. 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.

7. N/a. The proposed activity will comprise a waste operation.

8. 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*

8. N/a. The proposed activity will comprise a waste operation.

9. You must directly measure fresh water consumption and record it regularly at every significant usage point, ideally every day.

9. N/a. The proposed activity will comprise a waste operation.

9. Waste minimisation, recovery and disposal

These are waste minimisation, recovery and disposal appropriate measures for a regulated facility permitted to store, treat or transfer (or both) non-hazardous and inert waste.

1. 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*
- *optimises the reuse, regeneration, recycling or energy recovery of residues, including packaging*
- *makes sure you properly dispose of residues where recovery is technically or economically impractical*

1. A Residues Management Plan will form part of the Site's Environmental Management System.

The site treats, stores and manages waste in accordance with the waste hierarchy, prioritising recovery, recycling, re-use and prevention over disposal, where possible.

The following process is the assumed:

Incoming gully emptying and street sweeping will be received as 20 03 03.

When dewatered (treated) the residues are expected to comprise 20 03 03 (liquid format), discharged to foul sewer for treatment and 20 03 03 solid fraction, sent off-site for recycling. Street sweepings will be accepted under waste code 20 03 03 and exported using the same code.

2. Where you must dispose of waste, you must carry out a detailed assessment identifying the best environmental options for waste disposal.

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.

2. All incoming waste will be characterised in accordance with waste classification guidance (WM3). All treated waste will be classified in accordance with waste classification guidance (WM3). The residues management plan will be reviewed annually to ensure waste is being handled appropriately.