



Cumbria Waste Recycling Ltd

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# SEAL SANDS ENVIRONMENTAL PERMIT APPLICATION





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Cumbria Waste Recycling Ltd

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# SEAL SANDS ENVIRONMENTAL PERMIT APPLICATION

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# CONTENTS

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<b>1</b>	<b>NON-TECHNICAL SUMMARY</b>	<b>1</b>
<b>2</b>	<b>TECHNICAL SUMMARY</b>	<b>5</b>
<b>2.1</b>	<b>OPERATIONS OF THE FACILITY</b>	<b>5</b>
	HAZARDOUS WASTE TRANSFER STATION OPERATIONS	8
	WASTE TREATMENTS – OIL/WATER SEPARATION	9
	WASTE TREATMENTS –FOR CONSIGNMENT TO CEMFUEL MANUFACTURE	10
	WASTE TREATMENTS –FOR BULKING AND TRANSFER	11
	WASTE TREATMENTS –FOR TRANSFER ONLY	13
	WASTE OPERATIONS	13
<b>2.2</b>	<b>SITE LOCATION</b>	<b>14</b>
	FLOOD ZONES	18
	SOURCE PROTECTION ZONE	18
	AIR QUALITY MANAGEMENT AREA	18
<b>2.3</b>	<b>REGULATORY LISTING AND DIRECTLY ASSOCIATED ACTIVITIES</b>	<b>19</b>
<b>2.4</b>	<b>TECHNICAL COMPETENCE</b>	<b>22</b>
<b>3</b>	<b>MANAGING YOUR ACTIVITIES</b>	<b>23</b>
<b>3.1</b>	<b>ENVIRONMENTAL MANAGEMENT SYSTEM</b>	<b>23</b>
<b>3.2</b>	<b>WASTE PRE-ACCEPTANCE AND WASTE ACCEPTANCE</b>	<b>33</b>
	WASTE PRE-ACCEPTANCE	34
	WASTE ACCEPTANCE	34
	LABORATORY SMALLS WASTE PRE-ACCEPTANCE AND ACCEPTANCE	36
	WASTE OILS PRE-ACCEPTANCE AND ACCEPTANCE	37
	CLINICAL AND HEALTHCARE WASTE PRE-ACCEPTANCE AND ACCEPTANCE	37
	WASTE TRACKING	38
<b>3.3</b>	<b>EFFICIENT USE OF RAW MATERIALS AND WATER</b>	<b>39</b>

---



RAW MATERIALS	39
WATER	42
<b>3.4 ENERGY USE</b>	<b>42</b>
<b>3.5 AVOIDANCE, RECOVERY AND DISPOSAL OF WASTES</b>	<b>42</b>
<b>4 EMISSIONS MONITORING</b>	<b>44</b>
<hr/>	
<b>4.1 POINT SOURCE EMISSIONS TO AIR</b>	<b>44</b>
<b>4.2 POINT SOURCE EMISSIONS TO WATER</b>	<b>44</b>
<b>4.3 POINT SOURCE EMISSIONS TO SEWER</b>	<b>44</b>
<b>POINT SOURCE EMISSIONS TO GROUND</b>	<b>47</b>
<b>EMISSIONS OF SUBSTANCES NOT CONTROLLED BY EMISSION LIMITS</b>	<b>47</b>
<b>ODOUR</b>	<b>48</b>
<b>5 WASTE MANAGEMENT</b>	<b>49</b>
<b>6 ENVIRONMENTAL RISK ASSESSMENT</b>	<b>129</b>
<hr/>	
<b>6.1 RISK ASSESSMENT METHODOLOGY</b>	<b>131</b>
<b>7 BAT ASSESSMENT</b>	<b>162</b>
<b>8 APPENDICES</b>	<b>186</b>
<hr/>	
Table 2-1 - Designated Site Review – ecological receptors	18
Table 2-2 – Types of Activities	19
Table 2-3 – List of Directly Associated Activities	21
Table 2-4 – List of Waste Operations	21
Table 3-1 – Environmental Management System Requirements	23
Table 3-2 - Raw Material Inventory	40
Table 3-3 – Estimated Raw Material Use and Hazards	40
Table 4-1 - Point Source Emissions to Air	44
Table 4-2 - Point Source Emissions to Sewer – emission limits and monitoring requirements	44



Table 4-3 - Point Source Emissions to Ground – emission limits and monitoring requirements	47
Table 5-1 - List of Wastes Accepted for Oil/Water Separation	49
Table 5-2 - Types of Waste Accepted for Mixing for Consignment to Cemfuel Manufacture	52
Table 5-3 – Waste Types for Acceptance for Transfer including physical bulking	66
Table 5-4 – Waste Types for Acceptance for Waste Transfer (in containers only)	90
Table 6-1 - Risk Assessment Terminology	131
Table 6-2 - Risk Assessment Risk Matrix	132

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## **FIGURES**

Figure 1-1 - Enhanced Pre-application Response	4
Figure 2-1 - Site Location (Source: WSP/ArcGIS)	15
Figure 2-2 - Permit Boundaries	16
Figure 2-3 - SSSIs and Ramsar sites within 10 km of the site	17
Figure 2-4 - Local and National Nature Reserves within 2 km of site location	17
Figure 6-1 - Noise Advisory Tool Evaluation	130

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## **APPENDICES**

**No table of contents entries found.**

# 1 NON-TECHNICAL SUMMARY

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This application is for a bespoke environmental permit for a waste installation. The installation is a Hazardous Waste Transfer Station (HWTS) which imports hazardous and non-hazardous liquid and solid wastes for treatment and temporary storage pending transfer. Temporary storage activities and treatment activities exceed the thresholds for an installation under the Environmental Permitting Regulations.

Suitable wastes will be subject to pre-acceptance procedures before a booking is accepted for the waste to be delivered to the site. Waste will be delivered by road to the site weighbridge and waste acceptance procedures will be completed including sampling and analysis. All waste arrives at the site in suitable waste containers. If the waste cannot be accepted it will either be rejected from the site and returned to the waste producer, or placed in quarantine if the discrepancy can be resolved. Waste that passes acceptance stages is accepted at the site and placed into a suitable storage area. The site is able to safely and securely store wastes with different hazardous properties within various storage areas across the site, which are designed to meet hazardous waste storage requirements.

Depending upon the nature of the waste, the site will undertake waste treatments on suitable, compatible wastes in order to separate, bulk and repackage the waste for transfer offsite to a suitably licensed waste management facility where the waste undergoes additional treatment, is subject to recovery or is subject to disposal. These activities are undertaken by suitably qualified site chemists who have been assessed for their competency and will be overseen by a Technically Competent Manager.

As part of this application, the following requirements have been considered:

- **Management Systems:** the site will be managed in accordance with an Environmental Management System (EMS) that is certified to ISO 14001:2015 which is held by Cumbria Waste Group which is the parent company of Cumbria Waste Recycling Ltd. The scope of the EMS will be extended to include the HWTS once the site has become operational. Existing processes and procedures will be reviewed and updated as necessary to ensure that all operations of the HWTS are undertaken in accordance with those of the EMS.
- **Energy Efficiency:** the site is not anticipated to consume significant quantities of energy but the efficiency of the site will be reviewed as waste throughputs increase at the site. To ensure energy is being used efficiently, the site will take regular meter readings and review usage patterns. The site has implemented highly efficient LED lighting for both task and security lighting in order to minimise the consumption of electricity at the site.
- **Raw Materials and Water:** the site will consume quantities of raw materials and water in order to operate in safe and compliant manner. Water will primarily be consumed by cleaning operations and will be re-circulated where possible. Raw materials will be stored within the main Warehouse area in appropriate containers and used within waste treatments. Site staff are assessed for competency and Work Instructions will require staff to only use minimal quantities of raw materials when treatment or packing waste to achieve the required outcome.

- **Waste Management:** the operations of the HWTS are not considered to generate significant quantities of solid waste from day-to-day activities. Where possible, the site will clean used and empty waste containers to prepare them for re-use within the site. Due to the nature and variety of wastes handled at the site, some wastes are likely to be generated that will require disposal but this will be minimised at all times. The site will prioritise the transfer of customer wastes to offsite recovery facilities ahead of disposal facilities, in accordance with the requirements of the waste hierarchy. However, some hazardous wastes do require disposal to landfill.
- **Emissions to Air:** the operations of the HWTS will have two emissions to air associated with the passive displacement of air from the headspace of waste water storage tanks. The vents will contain small activated carbon and mineral media to abate air movements from the pumping operations of the tank.
- **Emissions of Waste Water:** the operations of the HWTS will not be the source of any direct emissions to water. There is one effluent emission to sewer and one domestic sewage emission to groundwater via a soakaway.

All waste waters and effluents generated within permitted boundary will be contained by impermeable surfaces and drain via sumps and gravity drains to a mixing tank. Water will be utilised within the site boundary to reduce the volume for disposal. As required, the effluent discharge tank will be emptied via one of two discharge routes. There is an emission to sewer for the off-site treatment of effluent and a Waste Water Treatment Plant. Where the effluent does not meet the discharge parameters, effluent will be subject to tanker transfer and removed from the site for disposal at a suitably licensed offsite facility. All emissions will be analysed before discharge.

A Surface Water Pollution Risk Assessment (SWPRA) has been completed as part of this application and is included as an Appendix. The SWPRA has been undertaken in accordance with the Environment Agency's Guidance: Surface water pollution risk assessment for your environmental permit, using environmental quality standards (EQS) for estuaries and coastal waters. No data relating to the quality of the HWTS, or a proxy site was available, therefore the SWPRA has been rearranged in order to determine the maximum allowable release concentration, with a focus on substances that have an associated BAT-AEL and those which are considered likely to be in the effluent.

Welfare facilities for the office staff at the HWTS (consisting of toilet and office-kitchenettes) which are not part of waste storage and waste treatment activities will generate a small volume of blackwater. This is discharged in accordance with General Binding Rules on small sewage discharges to ground through a septic tank and soakaway.

- **Emissions of Substances not Controlled by Emission Limits:** the operations of the HWTS are not considered to be significant sources of substances not controlled by emissions limits including those of dust, particulates, VOCs, pests and litter. The HWTS will implement appropriate measures to contain wastes and prevent them giving rise to emissions. Waste will be stored inside of fully enclosed waste packages, inside of fully enclosed buildings or a combination of both, in order to prevent and minimise emissions. A Dust and Emissions Management Plan has been prepared that explains how fugitive emissions will be prevented and minimised.

- **Odour:** the operations of the HWTS are not considered to be a significant source of odour that could impact on offsite receptors. The nature of the operations and variety of wastes to be accepted at the site means that odour may be generated. As per published guidance on the UK Government .Gov.uk website, the site has an odour management plan that explains how odours will be prevented and minimised.
- **Noise and Vibration:** the operations of the HWTS will not be the source of significant emissions of noise and vibration. According to the Environment Agency Noise Advisory Tool, a Noise Impact Assessment and Noise Management Plan are not required.
- **Environmental Risk Assessment:** An environmental risk assessment has been produced considering the waste handling, storage, treatment and transfer activities for the HWTS and is included within this application document. This covers the potential risks associated with protected habitats and species, discharges to sewer and surface water, odour, noise and vibration, fugitive emissions, bioaerosols and dust. This risk assessment considers the probability of an exposure event occurring and the resulting consequence on the environment.
- **Habitats Risk Assessment:** the environmental risk assessment considers the potential impacts of the site operations on the nearby protected habitat sites and species. This risk assessment considers the probability of an exposure event occurring and the resulting consequence on the environment. The risk assessment concludes that emissions to water and emissions to air from the installation are considered to be acceptable and of low risk with the planned mitigations.
- **Best Available Techniques (BAT):** operations of the HTWS have been assessed against the Waste Treatment BAT conclusions.
- **Site Condition Report (SCR):** a site condition report for the site of the HWTS has been produced taking into consideration the historical uses of the site location within the wider industrial estate. Land and groundwater sampling for substances has been undertaken and the results are included, based on the potentially polluting substances that are known to have been present on the site. The operator will utilise BAT techniques and appropriate measures in order to protect the land during the lifetime of the site.

The following Environment Agency application forms have been completed and are included within Appendix A:

Form 'Part A: About you'

Form 'Part B2: Apply for a bespoke environmental permit'

Form 'Part B3: New bespoke installation permit'

Form 'Part B4 New bespoke waste operation'

Form 'Part B6' Point source emissions to water from an installation

Form 'Part F1: Apply for an environmental permit (charges and declarations).'

Cumbria Waste Recycling Ltd and WSP have engaged with the Environment Agency via the enhanced pre-application service to understand the permitting options at the site. This because

there is an existing Environmental Permit for the site relating to the previous use of the site producing organic chemicals (as per EPR/BU0311IX).

The Environment Agency provided a written response, via email on Monday 3<sup>rd</sup> November 2025. Senior Permitting Officer Rusal Boston confirmed that there would essentially be no difference in how the Environment Agency would normally determine a permit application and that no additional information beyond the normal requirements of a bespoke installation permit would be required. An extract of the response detailing what the enhanced pre-application advice is copied below and provided as an Appendix to this application document:

### **Figure 1-1 - Enhanced Pre-application Response**

#### **What this enhanced pre application advice covers**

As part of this service, we have provided you with the following information:

The answer to your question as to how the Environment Agency will manage your application with regards to the existing permit held by a different operator on the proposed site is that there will essentially be no difference from how we would normally determine a permit application. We will not need any additional information beyond the normal requirements of a bespoke installations permit. However, we strongly advise that the guidance on site condition reports and establishing baseline reference date is followed. The pre-app basic advice document which will be sent with this advice provides more details about what is required.

We recommend that you carry out baseline monitoring of groundwater and soil and submit these results in a report. This will quantify the levels of pollutants present prior to you starting operation, which you can then compare to the levels you find when you cease carrying out the activity and wish to surrender your permit. However, if you choose not to submit any monitoring data you will be accepting that there is zero pre-existing contamination and accepting the risk that you may be required to clean up any pre-existing contamination when you surrender your permit.

If you are not storing combustible wastes on site, then a Fire Prevention Plan will not be required.

## 2 TECHNICAL SUMMARY

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### 2.1 OPERATIONS OF THE FACILITY

#### 2.1.1. Scope and Location

This application is for a new bespoke environmental permit for a Hazardous Waste Transfer Station (HWTS) in Seal Sands, Middlesborough which is operated by Cumbria Waste Recycling Ltd (CWR). The HWTS will also undertake a number of Waste Treatments on the accepted wastes prior to Transfer offsite to suitably licensed facilities.

The site address is:

Cumbria Waste Recycling Ltd

Seal Sands Hazardous Waste Transfer Station

Seal Sands Road

Seal Sands

Middlesborough

TS2 1UB

The national grid reference for the site is: NZ 53662 24741.

The HWTS comprises of imports of hazardous and non-hazardous liquid waste and hazardous and non-hazardous solid wastes for treatment and temporary storage pending transfer. Temporary storage activities and treatment activities exceed the thresholds for an installation under the Environmental Permitting Regulations (2016) as the site has the capacity to store more than 50 tonnes of hazardous waste and the treatment capacities will each exceed 10 tonnes per day. The site includes a number of Directly Associated Activities (DAAs) including temporary storage of non-hazardous wastes, cleaning of empty hazardous waste containers, collection of effluents and storage of raw materials. The site will also include a number of small-scale waste operations which do not exceed the threshold for a listed activity as the capacity will be less than 10 tonnes per day.

Site Location and Site Layout Plans can be found as an Appendix to this application (Appendix 2, Figure 1 and Figure 2).

#### 2.1.2. Site Activities

The primary function of the site will be Hazardous Waste Transfer Operations which are described below. There will also be four waste treatment activities which are physico-chemical treatments, blending and mixing treatments and repackaging treatments. Each treatment activity is described below and in Process Flow Diagrams which can be found as an Appendix to this application. The site will operate up to seven days per week in order to manage waste throughputs, including at weekends as required. Deliveries will normally take place between 6am and 6pm. The site will not normally undertake nighttime working.

The total throughput of the site will be a maximum of 600 tonnes per day and a maximum of 105,000 tonnes per annum. Storage at the site will be limited to a maximum quantity of 1,965 pallet spaces (equivalent to 1,965 tonnes of waste or 1,965 m<sup>3</sup> of liquid waste – this assumes a relative density of



waste is 1 tonne per m<sup>3</sup>) and 190m<sup>3</sup> within two waste water storage tanks. The total storage volume at the site is 2,155 tonnes or 2,155 m<sup>3</sup>.

The HWTS has no direct emissions to surface water from its operations.

The HWTS has two point source emissions to air from its operations. The Mixing Tank and Effluent Discharge Tank each have a small carbon filter in the roof of the tank in order to vent the headspace to atmosphere during pumping operations. The vent filter will use a replaceable cartridge to adsorb odorous components from the air as it passes to atmosphere. The vent uses activated carbon and natural minerals and is designed to allow for the media cartridge to be replaced when it has become saturated and in accordance with the manufacturer's specifications on the number of air flow movements. The filter will treat air flow that flows out of the tank as liquids (mainly surface water run off and the water fraction from oil/water separation) are pumped in to prevent the release of odour and organic compounds. These are located at emission points A1 and A2 on the site plan.

There is one indirect discharge to surface water, via a Waste Water Treatment Plant, at emission point S1 for transfers of process effluents from waste treatments and surface water run-off that is collected by the site drainage system. A risk assessment of the surface water pollution potential for this discharge has been undertaken as part of this permit application and the results indicate that a discharge concentration aligned to Waste Treatment BAT-AELs (for the Treatment of water-based liquid waste) would not cause an exceedance of the associated EQS values, and it is recommended that emissions limits within the Environmental Permit are aligned to the BAT-AELs. For substances that do not have an associated BAT-AEL, the limits should be set based on the SWPRA. Other effluents that are not suitable for discharge through emission point S1 are collected by the site drainage system and from waste treatments, contained within a suitable waste container (a tank or an IBC) prior to their removal from site by licensed waste carriers and disposal at a suitable treatment plant. Discharges of effluent is not a continuous flow and each batch will be tested and monitored prior to discharge to either the Waste Water Treatment Plant or via the tanker transfer.

The surface water drainage network is fully contained and directs surface water run off that is potentially polluted from waste storage areas into a central surface water sump. From the central sump, waste water is contained and manually pumped out of the sump and into the Mixing Tank. This Mixing Tank has a capacity of 60m<sup>3</sup> and is located inside of a concrete bund with a blind sump to contain any spillages and leakages. Waste waters from treatments of liquid wastes received at the HWTS can be pumped into the Mixing Tank, subject to compatibility testing. These liquid wastes include the water fraction from the physico-chemical treatment of waste water for oil/water separation, waste waters from site cleaning, waste waters from waste container cleaning and waste waters from non-hazardous waste treatments. The Mixing Tank can also receive waste waters from IBCs, tankers and from the water sump by means of manual pumping and can discharge waste waters to IBCs or tanker vehicles by manual pumping.

The Mixing Tank is connected to an Effluent Discharge Tank that is located inside of the same concrete bund. The Effluent Discharge Tank has a capacity of 130m<sup>3</sup> and can discharge waste waters for offsite treatment via a pipeline transfer, or to tankers for removal from the site and treatment. The two tanks are located inside of a concrete bund designed to contain the liquid within the tanks and there are no penetrations of the bund walls. For pipeline transfer, effluent pumps will pump the waste water via a subsurface pipeline which joins with effluents produced by the wider Seal Sands Industrial Estate and is pumped by offsite booster pumps to the Waste Water Treatment Plant. Operations and maintenance of the transfer pipeline are not the responsibility of Cumbria



Waste Recycling Ltd. The Mixing Tank and Effluent Discharge Tank are fitted with high-level and ultra-high level ultrasonic alarms to minimise spillages and overflow and transfer operations using pumps are undertaken by competent CWR staff. The Mixing Tank and Effluent Discharge Tank each has a small carbon filter in the roof of the tank in order to vent the headspace to atmosphere during pumping operations. The vent filter will use a replaceable activated carbon and natural minerals cartridge to adsorb components from the headspace air as it passes to atmosphere. Each filter is designed to allow for the media cartridge to be replaced when it has become saturated and in accordance with the manufacturer's specifications on the number of air flow movements.

The Flammable Area yard storage is separately contained and waste waters within this area drain to two sumps; from these sumps, waste waters are manually pumped to the central sump to prevent mixing of incompatible substances that may lead to a chemical reaction.

The waste water from within the site laboratory also discharges into the sealed drainage system and will be disposed of with the effluents discharging at emission point S1 or transferred off site in tanker vehicles (following sampling and testing).

Within the perimeter of the installation is an existing septic tank which discharges to an existing soakaway located outside of the installation boundary. This septic tank is associated with domestic sewage arising from the welfare facilities within the Site Offices only (toilets, handwashing, kitchen area and tea/coffee making) for the personnel working at the HWTS. The discharge will comply with General Binding Rules on small sewage discharges to ground and be less than 2m<sup>3</sup> per day (based on five members of staff each producing 30 litres per day) and therefore no monitoring is proposed. The emission is included since the soakaway is located outside of the perimeter boundary and there is a transfer outside of the installation boundary.

The site infrastructure consists of impermeable concrete with sealed joints across the site which is connected to an enclosed drainage system. The perimeter of the site is contained by suitable kerbing and ramps which would contain any spillages within the site boundary and prevent any runoff to impermeable surfaces. There are areas of impermeable surfacing located inside of the permit boundary however these areas are not used for any waste storage or waste treatment activities; the only items that will be placed in this area are non-wastes which do not have the potential to cause pollution (e.g. clean, empty containers or pallets of inert materials e.g. vermiculite). The drainage system directs waste waters to a central surface water pump as described above.

The design of the site's drainage system and impermeable surfaces creates different bunded areas and provides secondary and tertiary containment (in combination with tank bunding and portable bunds used with IBCs/drums) to the liquids being stored on site. There are also a number of enclosed buildings located on the site which provide containment for the wastes being stored and treated here. There is no drainage inside of the buildings but ramps prevent liquid waste from escaping these areas. A figure showing the current site surfacing within the permit boundary can be found as an Appendix to this application (Appendix 2, Figure 3).

The HWTS is not considered to be the source of significant fugitive emissions that could cause pollution at sensitive off-site receptors however the variety of the wastes handled at the site and the nature of the waste treatment activities could be the sources of dust, particulates, VOCs, litter and odour. An Odour Management Plan and a Fugitive Emissions Management Plan are included can be found as Appendices to this application.



Finally, the site will store potentially combustible wastes and a Fire Prevention Plan can be found as an Appendix to this application.

## HAZARDOUS WASTE TRANSFER STATION OPERATIONS

The HWTS manages waste collected by Cumbria Waste Recycling Ltd directly from waste producers and wastes delivered to the HWTS by third-party companies. All waste is subject to waste pre-acceptance and waste acceptance procedures to ensure the wastes are suitable for acceptance at the site.

Waste is delivered to site by road and contained within various sized waste bins and waste containers, including but not limited to: enclosed container skips, 4-wheeled bins, 2-wheeled bins, bulk tankers, intermediate bulk containers (IBCs), bottles, drums, jerry cans, and waste sacks. Loose solid wastes and waste in bulk is not accepted at the site. The site operates a one-way system and the site speed limit is 5 mph. Vehicles entering the site from Seal Sands Industrial Estate report to the site weighbridge. The HWTS manages hazardous and non-hazardous wastes from a variety of industrial and commercial processes and similar wastes from municipal sources, as listed in Chapter 5, Waste management of this Application.

All wastes accepted by the site are weighed at the site weighbridge, sampled (as required) and transferred to the most appropriate storage location depending on the classification and hazardous properties of the waste. The site has an on site laboratory to undertake sampling and analysis of waste types accepted but will also use off-site laboratories to complete analysis of waste types, if required. Sampling and analysis will normally take place on the same day that the waste is accepted but suitable space is afforded to temporarily store wastes in the event of a consignment arriving late in the day or sampling results not being available before the site closes. Quarantine space is also provided for temporary storage if non-conforming wastes are accepted. Quarantine storage is for a maximum of five working days to allow for discrepancies to be resolved or arrangements to be made with the waste producer to remove the quarantined waste from the site.

Wastes will be stored in different locations at the HWTS depending upon the type of waste and its hazardous properties. There are five main locations for the storage of wastes including:

1. Warehouse storage within the main Warehouse. This is an enclosed steel building used to store packaged wastes on racking in rows that are separated by a suitable distance. There is vehicular access to the front of the main Warehouse which is bunded by sloping ramps that prevent waste from escaping outside of the building. High-level vents in the main Warehouse roof provides ventilation to the building. The main Warehouse accepts a variety of compatible wastes for temporary storage and has a quarantine area. The main Warehouse does not accept flammable or oxidising wastes for temporary storage.
2. Flammable Area. Flammable waste is only stored within the Flammable Area yard storage which is an open concreted area of the site with a covered area located on the western edge. The whole of the Flammable Area forms an engineered bund with two sumps that can be used to pump out waste waters generated here, comprising of impermeable concrete surfacing and kerbing. Surface water runoff that is potentially contaminated from the waste storage area drains to sumps located on the northern edge of the impermeable area. Access

for vehicles is via the one-way route around the site, entering from the east and exiting to the north. Raised humps prevent the escape of liquids and maintain the bund area.

The Flammable Area is located within a central area of the site and is at least 6 metres away from all other areas of the site that are used to store combustible wastes to manage risk from fires and prevent fires from spreading.

3. Secure Storage Area within a brick built, dry covered small Warehouse, located approximately 8 metres away from the Flammable Area. This Secure Storage Area is used for organic peroxides and oxidisers only with vehicle access via the one-way route around the site. The Secure Storage Area will have additional fireproof chemical cabinets inside of the building which are locked when not in use and used for the storage of specific waste types. The keys will be stored within a secure lock box on site, in a different location.
4. Yard storage within one of two external storage areas that accept similar wastes to the main Warehouse for external storage:
  - a. The Rear Yard is located to the south of the main Warehouse storage. This is an open concrete area which drains to a sump with kerbing forming a perimeter of the yard forming an enclosed area of impermeable surfacing.
  - b. The Bioplant yard which is located in the north of the site. This is an open area of concrete with a raised hump at the entrance, which forms an impermeable surface which drains to a sump.

Waste removed from the site is transferred within the waste container onto a suitable vehicle and dispatched from the site to a suitable licensed facility for recovery or disposal. Some liquid wastes will be pumped out of existing waste containers using a small air diaphragm pump and into a larger bulk tanker vehicle and dispatched from the site to a suitable licensed facility for recovery or disposal. Wastes are subject to waste treatment before being removed from the site as described below.

The Waste Transfer Station will also store raw materials associated with its operations including diesel for fuel used mobile plant and equipment operating at the site, packaging materials and empty waste containers that are not being used.

The proposed throughput for the HWTS activity is 105,000 tonnes per annum. See Table 2-2 – Types of Activities.

## **WASTE TREATMENTS – OIL/WATER SEPARATION**

The HWTS accepts hazardous waste in waste containers and road tankers for physical treatment to separate oil and water fractions from liquid wastes, using gravity to separate the two fractions. As per the pre-acceptance and acceptance procedures (See Section 3.2), suitable wastes will be pre-booked for delivery to the site if there is sufficient space and staffing to accept the waste. On arrival, the waste is weighed, visually inspected, undergoes document checks and sampled to analyse the waste.

The waste is first transferred to the Waste Acceptance Area of the main Warehouse, which is the reception area, to allow for the laboratory testing to be completed. If a waste is non-compliant with waste acceptance procedures, the container is moved to the quarantine area inside of the main Warehouse and stored for a maximum of 5 working days. This allows for the customer to be

contacted and the non-conformance to be resolved or for the customer to return and remove the waste from the site. For wastes that pass all acceptance checks, the waste is moved to storage racking and temporarily stored in the main Warehouse pending treatment or within external yard storage. Site staff will utilise fork-lift trucks to transfer waste containers within the site and move it from storage to treatment areas.

The waste treatment is a physical treatment which uses gravity to separate the different fractions of oil and water within the waste. Treatment will take place inside of the site Workshop or the Flammable Area yard storage. Liquid waste containers will be placed onto portable bunds or the waste discharged into larger containers (e.g. IBCs) placed on portable bunds. The oil and water will be allowed to separate by gravity and after a suitable period of time, the aqueous phase fraction is drawn off from the bottom of the container and discharged into a second, clean water IBC and this fraction is bulked together. The water fraction is subject to visual checking for residual hydrocarbons and testing. If the water is suitable for discharge, it is transferred to the on-site Effluent Discharge Tank and discharged to sewer, as per the effluent transfer agreement, via emission point S1.

Residual oils will be stored in suitable containers and stored until there is a sufficient volume available for a vacuum tanker vehicle collection to remove a larger consignment of the waste from the site for recycling.

The proposed throughput for the oil/water separation is 15,000 tonnes per annum and the treatment will have the capacity that is greater than 10 tonnes per day. See Table 2-2 – Types of Activities and Table 5-1 for the List of Wastes for this activity.

## **WASTE TREATMENTS –FOR CONSIGNMENT TO CEMFUEL MANUFACTURE**

The HWTS accepts hazardous and non-hazardous liquid waste for blending or mixing prior to consignment offsite for further waste treatment at a suitably licensed and permitted facility. As per the pre-acceptance and acceptance procedures (See Section 3.2), suitable wastes will be pre-booked for delivery to the site and upon arrival, the waste is weighed, visually inspected and a sample of the representative waste is taken to analyse the waste. Waste containers are moved into the Waste Acceptance Area of the main Warehouse, which is the reception area, to allow for the laboratory testing to be completed. If a waste is non-compliant with waste acceptance procedures, the container is moved to the quarantine area inside of the main Warehouse and stored for a maximum of 5 working days. This allows for the customer to be contacted and the non-conformance to be resolved or for the customer to return and remove the waste from the site.

Hazardous and non-hazardous waste for consignment to cempfue manufacturer has a high calorific value and is likely to be classified as flammable waste so is moved as soon as possible from the main Warehouse to the Flammable Area yard storage and temporarily stored. Prior to any mixing, a full compatibility test will be carried out to ensure that the material is safe to mix together. This testing will be carried out over a 24 hour period to ensure that no slow reactions also take place. Cempfue blending will be carried out from either 205L drums or IBCs. Smaller containers of suitable flammable materials are manually bulked into the larger containers prior to consignment. Only site staff with suitable qualifications (HNC chemistry or equivalent) will undertake this blending and chemists will be approved by the Transfer Station Manager as competent. Site staff are overseen by the Supervisor Operator, who oversees staff and organises the day-to-day site activities, waste movements and treatments. Once a sufficient volume of compatible wastes is available, a bulk tanker transfer is booked to remove the waste from the HWTS and consign the waste offsite. The



waste containers, which will make up the tanker load, will be selected in advance of the tanker arrival and using a fork lift truck, moved to the appropriate collection location. When bulking flammable materials, all mobile plant and equipment will be approved to the correct specification for the material being loaded, the tanker being loaded will be suitably earthed and hoses used will be anti-static.

The contents of the waste containers must be assessed and compatibility tests carried out by the site chemists. Where required, after assessment by Technical Staff based on waste characteristics and origins, a full mimic will be produced from every container which is to be loaded and flash point tested prior to the waste being loaded onto a tanker. The Transfer Station Manager, in consultation with the Dangerous Goods Safety Advisor will determine the classification each load and transportation requirements and authorise the transfer of wastes. Waste containers will be loaded onto the tanker vehicle from the rear and flammable liquids will only be loaded from inside of the Flammable Area yard storage. The tanker vehicle driver will empty the waste containers by suction pipe but will use the dead-vac loading method. This is when the tanker is put under full vacuum then switched off and the waste is then sucked into the empty vacuum without the tanker running. If any waste may be odorous then the tanker vent will be put through a basic scrubber via a 1.5" hose. This will be either water or 15% sodium hydroxide in IBCs and will be confirmed by the site chemist.

Prior to despatch a representative sample of the load is taken and analysed to check for conformity with the paperwork, vehicle/tanker type and disposal site requirements. Results of analysis should be recorded. Labelled samples should be kept in the sample store for a period of three months.

Waste packaging from the process is also transferred off site for re-use or recycling and placed back onto the market for another lifecycle. This avoids the generation of waste and need to dispose of packaging that is still fit for purpose. Any packaging that cannot be cleaned or is damaged and unable to be repaired would be disposed of as wastes generated by the HWTS activities. Site staff will utilise fork-lift trucks to transfer full and empty waste containers within the site.

The proposed throughput for this activity is 50,000 tonnes per annum and the treatment capacity will exceed 10 tonnes per day. See **Table 2-2 – Types of Activities** and Table 5-2 for the List of Wastes for this activity.

## **WASTE TREATMENTS –FOR BULKING AND TRANSFER**

The HWTS accepts hazardous and non-hazardous waste for bulking at the site by repackaging of compatible wastes of the same type and onwards transfer for recovery or disposal at a suitably licensed offsite facility. Suitable non-hazardous and hazardous wastes will be pre-booked for delivery to the site, accepted as per the pre-acceptance and acceptance procedures (See Section 3.2). Upon arrival, the waste is weighed, visually inspected and a sample of the representative waste is taken to analyse the waste.

Waste containers are moved into the Waste Acceptance Area of the main Warehouse, which is the reception area, to allow for the laboratory testing to be completed. Following the acceptance of the waste, containers are moved to the most suitable storage location at the site which may be inside of the main Warehouse, one of the yards, the Flammable Area yard storage or the Secure Store depending upon the nature of the wastes and hazardous properties of each waste type.

Inside the main Warehouse, waste will be stored on racking within original packaging until there is a need to complete the repackaging activities and storage will be in accordance with the requirements

of Chemical Warehousing, The Storage of Packaged Dangerous Substances (HSG71, The Health and Safety Executive, 2009). The racking is of sufficient size and space to store different wastes in different areas whilst applying the segregation and separation distances. Within the yard storage area, waste containers and pallets will be stored up to two high. The site will apply the general recommendations for the separation or segregation of different classes of dangerous substances from HSG71. As required, wastes will be segregated from incompatible substances. Segregation will be on the basis of separation distances as specified in HSG71 and will be separated by adequate space e.g. acidic substances segregated from caustics. Where wastes cannot be stored within the same building, these incompatible substances will be stored in different buildings. Other waste packages will be kept apart using recommended separation distances for storage of different wastes within the same storage area, e.g. sufficient space is available to be able to store acidic materials away from caustic materials by using opposite ends of the racking or different aisles. Finally, some substances will be isolated within suitable secure chemical cabinets e.g. organic peroxides.

Each area of racking is bunded to contain spillages and prevent incompatible wastes coming into contact with each other in the event of a spillage. The entry and exit to the main Warehouse is also fitted with bund ramps which will provide tertiary containment for all of the wastes being stored inside of the main Warehouse.

Primary containers that are moved to the Flammable Area yard storage will be stored on the impermeable surfacing prior to any bulking and repackaging activities. The whole of the Flammable Area yard storage comprises impermeable concrete surfacing which is resistant to the materials stored here and connected to a sealed drainage system, that drains to a sump. Containers will be stacked up to two units high within this area and will be checked regularly for stability to prevent any spillages.

Waste bulking and repackaging will take place inside of the site Workshop, which is located at the main Warehouse but is accessed separately. Site staff will utilise fork-lift trucks to transfer waste containers to the site Workshop from the existing storage location. Within the site Workshop, site staff who are trained chemists will handle, bulk-up and repackage the different volumes of compatible chemicals, which can include flammables, toxic wastes and oxidisers. Normally this will be completed manually from small volume containers but if larger containers (e.g. IBCs) require repackaging, the site staff will use small pumps to transfer the liquids and drum rotators attached to the site fork-lift truck (as appropriate).

Wastes will only be repackaged if they are the same waste type, will not undergo chemical reactions when being blended and do not change the composition of either waste type. All staff undertaking this activity will be suitably trained in carrying out these activities and for managing spillages or emergencies. All site chemists will be qualified as a minimum with a Higher National Certificate (HNC) in chemistry or equivalent and be approved as competent by the Transfer Station Manager. The activity will take a large number of small volume containers (e.g. laboratory smalls of between five and twenty litres volume), unpackage them from any secondary containers before removing the lids and safely transferring the wastes into a larger primary container, such as an IBC. This makes the waste more efficient to handle and transfer away from the site for recovery or disposal. Alternatively, small volume containers of the same waste types will be repackaged into a suitable larger container (e.g. clip top drum) and filled with an inert material (to prevent damage during onwards transfer).

The main Warehouse is suitably ventilated by high-level ventilation and the site Workshop has localised vent extraction to atmosphere.

The proposed throughput for this activity is 90,000 tonnes per annum and the daily capacity will exceed 10 tonnes per day of treatment. See Table 2-2 – Types of Activities and Table 5-3 for the List of Wastes for this activity.

## **WASTE TREATMENTS –FOR TRANSFER ONLY**

The HWTS accepts containerised hazardous and non-hazardous waste for transfer only within original primary packaging. Suitable non-hazardous and hazardous wastes will be pre-booked for delivery to the site, accepted as per the pre-acceptance and acceptance procedures (See Section 3.2). Upon arrival, the waste is weighed, visually inspected and a sample of the representative waste is taken to analyse the waste.

Waste containers are moved into the Waste Acceptance Area of the main Warehouse, which is the reception area, to allow for the laboratory testing to be completed. Following the acceptance of the waste, containers are moved to the most suitable storage location at the site which may be inside of the main Warehouse, one of the yards, the Flammable Area yard storage or the Secure Store. Inside the main Warehouse, waste will be stored on racking within original packaging until there is a need to complete the repackaging activities and storage will be in accordance with the requirements of Chemical Warehousing, The Storage of Packaged Dangerous Substances (HSG71, The Health and Safety Executive, 2009) as detailed above or within one of the yard storage area, where the waste containers and pallets will be stored up to two high. As described above, the site will apply the general recommendations for the separation or segregation of different classes of dangerous substances and liquid waste will be suitably banded and contained.

Primary containers that are moved to the Flammable Area yard storage will be stored on the impermeable surfacing prior to any bulking and repackaging activities. The whole of the Flammable Area yard storage comprises impermeable concrete surfacing which is resistant to the materials stored here and connected to a sealed drainage system, that drains to a sump. Containers will be stacked up to two units high within this area and will be checked regularly for stability to prevent any spillages.

Once a sufficient volume of one type of waste (or multiple wastes that can safely be collected on the same vehicle) is available to facilitate an efficient transfer off site, the waste is removed from the HWTS within the waste container and transferred to a suitably permitted offsite facility. Site staff will utilise fork-lift trucks to transfer waste containers within the site.

The proposed throughput for this activity is 90,000 tonnes per annum which will exceed 10 tonnes per day of treatment capacity. See Table 2-2 – Types of Activities and Table 5-4 for the List of Wastes for this activity.

## **WASTE OPERATIONS**

The HWTS is the location for a number of waste treatments that do not meet the threshold of a listed activity in the Environmental Permitting Regulations.

- The site will treat solid waste salt by dissolving the waste into water with a capacity not exceeding 10 tonnes per day. Solid wastes will be accepted at the site and water will include rain water that has been captured within the site surface water drainage system or mains water. Solid waste will be decanted from the primary packaging and placed into a 1,000 litre IBC of water by a trained chemist who will monitor the rate the waste dissolves and carry out testing of suitable parameters to ensure the reaction has completed. Following testing, the effluent will be transferred off site for disposal at a suitably licensed disposal facility. This will treat suitable wastes listed in Table 5-3.
- The site will treat empty hazardous waste containers that are not suitable for re-use or recycling that have been generated by the activities of the Waste Transfer Station. This will be a physical treatment activity not exceeding 10 tonnes per day. Metal and plastic waste containers will be physically treated by cutting or crushing to reduce the size of the container and facilitate easier and more efficient onwards transfer for disposal at a suitably licensed waste management facility. This will treat suitable hazardous wastes listed in Table 5-3.
- The site will treat non-hazardous aqueous wastes that contains low-concentrations of contaminants through adsorption on to activated carbon within a 40m<sup>3</sup> tank. This will be a physico-chemical treatment activity not exceeding 75 tonnes per day. Liquid wastes accepted at the site will be decanted into the tank and the waste water will be treated. Following treatment the waste water will be sampled and either transferred to the Effluent Discharge Tank for discharge via sewer, or, pumped into 1,000 litre IBCs and removed from the site for disposal at a suitably licensed facility. This will treat suitable non-hazardous wastes listed in Table 5-3.

## 2.2 SITE LOCATION

The HWTS will be located at Seal Sands industrial estate, Teesside, an industrial estate which has historically been used by the chemical industry and waste management industry, situated on the mouth of the River Tees. The site location is shown in Figure 2-1 below. The HWTS will be operated by CWR under a single operator/single site basis and will consist of two distinct areas separated by a road as pictured in Figure 2-2. A site plan showing the permit boundary and all of the land on which your activities will take place is included in the Appendix.

Much of the site comprises previously developed land laid to grass and low-lying vegetation because of decades of previous industrial activities on the site. The soilscape upon which the site lies are largely made up of loamy and clayey soils of coastal flats with naturally high groundwater (Magic maps) and has a medium to high groundwater vulnerability classification.

At the site, CWR will accept a variety of hazardous wastes for temporary storage, before the hazardous waste is removed from the site for further treatment or disposal at offsite locations.

CWR will operate the Seal Sands HTWS on land owned by CWR (shown in green on Figure 2-2 below) and on land leased from a third party (shown in blue on Figure 2-2 below) on a long term lease. The closest receptor is the ConocoPhillips Teesside terminal, which is located on the northern boundary of the Seal Sands HWTS and separated by two internal haul roads at a distance of approximately 20 metres. A chemical plant, Intertek, can be found 0.22 km to the East of the site, separated by a railway line, Seal Sands Road, unmade ground and a number of pipelines. Immediately to the south of the site is unmade ground consisting of grass and low-lying vegetation

followed by the Greenergy Biofuels' biodiesel manufacturing plant (approximately 70 metres from the permit boundary). Greenergy Biofuel holds an Environmental Permit (EPR/EP3334AS) for producing organic chemicals containing oxygen (Section 4.1 Part A (1) (a) (ii)) and for disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment (Section 5.4 Part A (1) (a) (ii) – for effluent treatment).

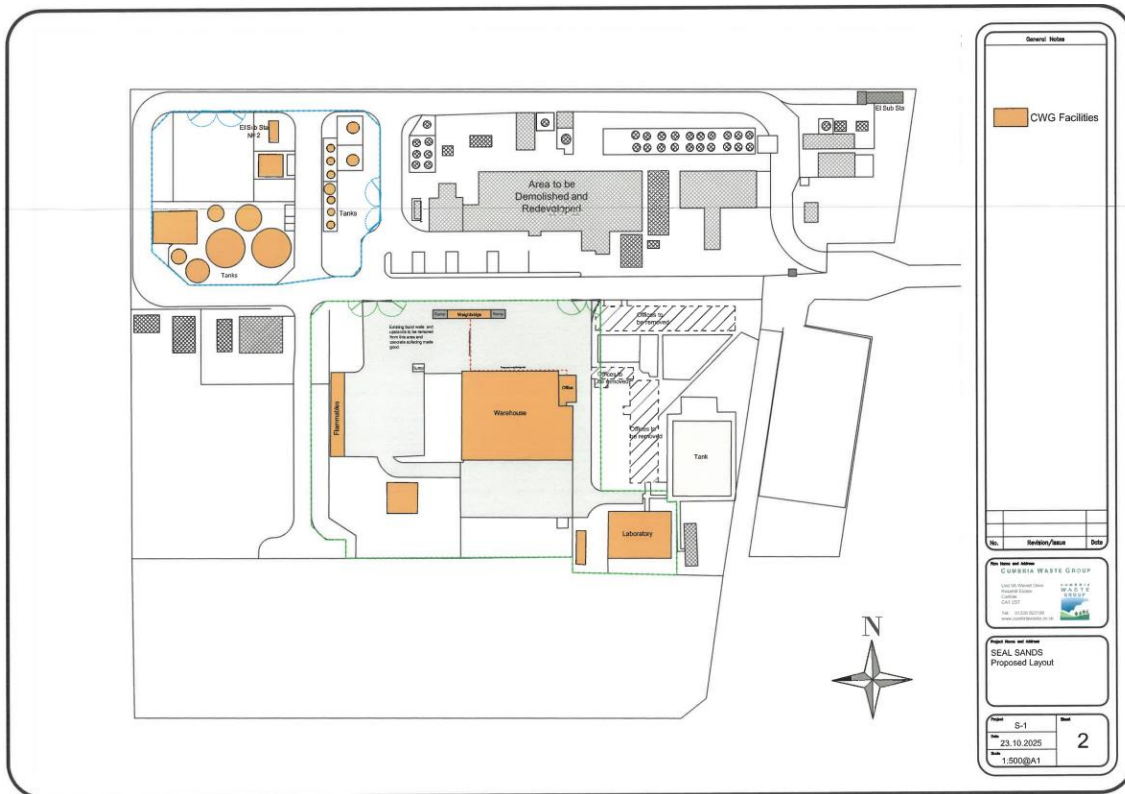
To the south-west of the site, at a distance of approximately 0.15km from the permit boundary is the Fine Environmental Services Limited and Fine Organics Ltd site. This site is a chemical production site with two linked Environmental Permits. One permit (EPR/PP3439GG) is for a number of specified activities, including: producing organic compounds, plant health products and biocides, pharmaceutical production and manufacturing activities involving carbon disulphide or ammonia. The second permit is for the incineration of hazardous waste (Section 5.1 Part A (1) (a)), including the incineration of hazardous liquid wastes from the adjacent chemical plant and incineration of wastes received from other sources.

To the west is approximately 0.6km of undeveloped grassland, some areas of dense scrub and some areas of taller vegetation. The receptors to the west are industrial buildings, presumably associated with the ConocoPhillips facility and further buildings to the south-west associated with Fine Organics Ltd.

**Figure 2-1 - Site Location (Source: WSP/ArcGIS)**



**Figure 2-2 - Permit Boundaries**



The site is located away from sensitive human receptors, the nearest are found approximately 3.8 km to the south west of the site, beyond the River Tees on the A65/Middlesborough Road, in the South Bank area of Middlesborough. Residential receptors can also be found 4.2 km to the north of the site, in Seaton Carew. Human receptors may also be found at nearby recreational facilities including the footpaths, car parks and hides associated with Teesmouth National Nature Reserve, approximately 2km west of the permit boundary, North Gare Beach and South Gare Marine Club (both approximately 3km to north east), either side of the mouth of the River Tees.

There are no Local Nature Reserves (LNR) or Ancient Woodland sites within a 2 km vicinity of the site and no Marine Conservation Zones (MCZs), Special Areas of Conservation (SACs) or Special Protection Areas (SPAs) within a 10 km vicinity of the site, however there is one Site of Specific Scientific Interest (SSSI) and one Ramsar site shown in Figure 2-3 below.

One overlapping SSSI and Ramsar site fall under the same title of Teesmouth and Cleveland Coast, however the SSSI for this site covers 2,964.37 m<sup>2</sup> of area where the Ramsar site covers 2,085.29 m<sup>2</sup>. The Teesmouth and Cleveland Coast areas surround the site in all directions; ~0.43 km to the North, ~1.35 km to the South, to the ~0.73 km East, ~1.84 km to the West. The majority of the Teesmouth and Cleveland Coast SSSI is of 'unfavourable recovering condition', however some parts, closer to the sea lie within the 'unfavourable no change' or 'unfavourable declining' conditions.

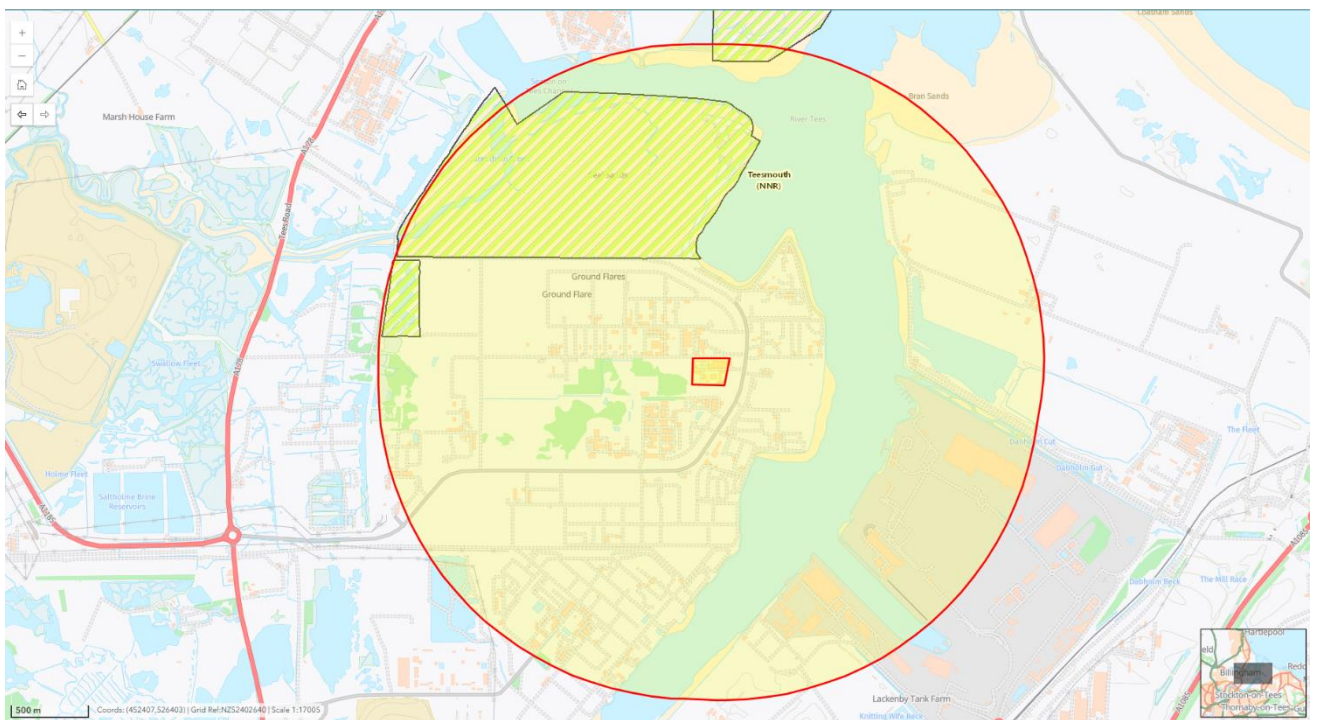
Within 2 km of the site there is one National Nature Reserve (NNR) shown, in Figure 2-4 below. Teesmouth National Nature Reserve has an area of 359.57 Ha with its closest point NE to the site at 0.64 km away from the centre of the site. There are no Local Nature Reserves (LNR) within 2 km of the site.

There is also one Local Wildlife Site (LWS) within 2 km of the site. Zinc Works Bird Field LWS is located approximately 1.975 km to the north of the site on the north of the River Tees.

**Figure 2-3 - SSSIs and Ramsar sites within 10 km of the site**



**Figure 2-4 - Local and National Nature Reserves within 2 km of site location**



The Tees Estuary is a habitat European Eels and a migratory route for the following: Atlantic Salmon, European Eel, River Lamprey and Sea Lamprey.

One of the UK's geological places to visit, Redcar Rocks, is approximately 7.25 km away from the site.

**Table 2-1 - Designated Site Review – ecological receptors**

Site Name	Designation	Direction from site	Distance from site (km)
Teesmouth and Cleveland Coast	Ramsar	N	0.430
Teesmouth and Cleveland Coast	SSSI	N	0.430
Teesmouth	NNR	NE	0.640
Zinc Works Bird Field	LWS	N	1.975
N/A	SAC	N/A	N/A
N/A	SPA	N/A	N/A
N/A	MCZ	N/A	N/A
N/A	LNR	N/A	N/A
N/A	Ancient Woodland	N/A	N/A

## FLOOD ZONES

This site is in Flood Zone 1 which indicates a low probability of flooding from rivers and the sea (less than a 0.1% or 1 in 1,000, chance of flooding from rivers and the sea). The site also has a low likelihood of flooding from surface waters with a small area of the site at higher risk of surface water flooding (annual exceedance probability of 3.3%).

## SOURCE PROTECTION ZONE

The site is not located within a Source Protection Zone (SPZ).

The nearest surface water features are small surface water ponds located approximately 30m to the south and 175m to the west of the site. The nearest main river is the River Tees which is located approximately 0.525 km to the north east of the permit boundary.

## AIR QUALITY MANAGEMENT AREA

This site is not located within an Air Quality Management Area (AQMA) according to DEFRA.

## 2.3 REGULATORY LISTING AND DIRECTLY ASSOCIATED ACTIVITIES

CWR will use the site at Seal Sands for the temporary storage of hazardous waste with a capacity exceeding 50 tonnes pending another waste activity and a number of waste treatment activities with capacities exceeding 10 tonnes per day as listed below.

**Table 2-2 – Types of Activities**

Activity No.	Schedule 1 Reference	Description of Activity	Annual or Daily Capacity	R & D codes
AR1	Section 5.6 A(1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending disposal or recovery:	Temporary storage of packaged hazardous waste.	Hazardous waste transfer station activities with a maximum of 2,155 tonnes temporary storage at any time (equivalent to 2,155m <sup>3</sup> of storage volume)  1,965 tonnes of storage within waste containers and 190 m <sup>3</sup> of tank storage.  The maximum annual throughput of 105,000 tonnes.  All wastes to be handled and stored on an impermeable surface.	R13 - Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)  D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)
AR2	Section 5.3 Part A(1) a (ii)  Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment.	Treatment of hazardous waste	80 tonnes per day  The maximum annual throughput of 15,000 tonnes.  For waste specified in Table 5-1.  From receipt of waste on site to physical treatment by gravity settlement to storage of, oils and waste waters.	R3 – Recycling / reclamation of organic substances which are not used as solvents  D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12.
AR3	Section 5.3 Part A(1) a (iii)  Disposal or recovery of	Treatment of hazardous waste	290 tonnes per day  The maximum annual throughput of 50,000 tonnes.	R3: Recycling / reclamation of organic substances which are not used as solvents

	hazardous waste with a capacity exceeding 10 tonnes per day involving blending or mixing prior to submission to any of the other activities listed in this Section or in Section 5.1;		For waste specified in Table 5-2.  From receipt of liquid waste on site, followed by compatibility testing, mixing/blending with other suitable wastes and storage prior to transfer offsite to a suitable facility.	R5 Recycling / reclamation of other inorganic compounds  D13: Blending or mixing prior to submission to any of the operations numbered D1 to D12
AR4	Section 5.3 Part A(1) a (iii)  Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving blending or mixing prior to submission to any of the other activities listed in this Section or in Section 5.1;	Treatment of hazardous waste	520 tonnes per day  The maximum annual throughput of 90,000 tonnes.  For waste specified in Table 5-3.  From receipt of liquid wastes on site, followed by compatibility testing, mixing/blending with other suitable wastes and storage prior to transfer offsite to a suitable facility.	D13: Blending or mixing prior to submission to any of the operations numbered D1 to D12  R3: Recycling / reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)  R4: Recycling /reclamation of metals and metal compounds  R5: Recycling /reclamation of other inorganic materials
AR5	Section 5.3 Part A(1) a (iv)  Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging prior to submission to any of the other activities listed in this Section or in Section 5.1;	Treatment of hazardous solid waste	520 tonnes per day  The maximum annual throughput of 90,000 tonnes.  For waste specified in Table 5-4.  From receipt of wastes on site, followed by compatibility testing and repackaging.	D14: Repackaging prior to submission to any of the operations numbered D1 to D13  R12: Exchange of wastes for submission to any of the operations numbered R1 to R11

**Table 2-3 – List of Directly Associated Activities**

<b>Activity Reference</b>	<b>DAA reference</b>	<b>Description of Activity</b>	<b>Limit of activity</b>
AR6	Temporary storage and transfer of non-hazardous waste	Temporary storage of packaged and bulk non-hazardous waste  D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)	Maximum of 40,000 tonnes temporary storage at any time.
AR7	Cleaning of empty hazardous waste containers	Washing of waste containers from storage and treatment activities using water.  D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12, e.g. evaporation, drying, calcination	From receipt of empty waste containers for treatment to dispatch of cleaned packaging for off-site reuse and recycling.  From the generation of contaminated effluent for disposal.  Maximum treatment capacity of less than 10 tonnes per day.
AR8	Collection of contaminated effluent discharge and disposal offsite	Discharge of effluent from the installation	From the receipt of suitable effluents into the Effluent Discharge Tank from site operations to discharge via sewer at emission point S1.  From the receipt of surface water to the point where the water is taken offsite by tanker.
AR9	Storage of raw materials	Storage of raw materials including diesel, anti-foam and neutralisation chemicals	From the receipt of raw materials, storage and use within the facility.

**Table 2-4 – List of Waste Operations**

<b>Activity Reference</b>	<b>Description of Activity of waste operations</b>	<b>Limit of activity</b>
AR10	Physical treatment by dissolving solid waste including solid salts into water, not exceeding 10 tonnes per day  R5: Recycling/ reclamation of other inorganic materials	Disposal of waste salt into water in small and intermediate bulk containers.  From receipt of waste at the site to treatment and off-site disposal of the effluent.

	D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12, e.g. evaporation, drying, calcination	Maximum treatment capacity of less than 2 tonnes per day. For suitable hazardous waste specified in Table 5-3.
AR11	Physical treatment of empty hazardous waste containers not suitable for reuse or recycling, not exceeding 10 tonnes per day  D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12, e.g. evaporation, drying, calcination	Cutting and crushing of metal and plastic waste containers not for re-use.  From receipt of empty waste containers for physical treatment to reduce the size and off-site disposal.  Maximum treatment capacity of less than 10 tonnes per day.
AR12	Physico-chemical treatment of non-hazardous aqueous waste, not exceeding 75 tonnes per day  R4: Recycling/ reclamation of metals and metal compounds  D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12, e.g. evaporation, drying, calcination	Adsorption of low-concentration contaminants on to activated carbon from aqueous wastes in a 40m <sup>3</sup> tank.  From receipt of liquid waste at the site to treatment and off-site disposal of the effluent.  Maximum treatment capacity of less than 50 tonnes per day.  For suitable hazardous waste specified in Table 5-3.

## 2.4 TECHNICAL COMPETENCE

Seal Sands HWTS will have a Technically Competent Manager to operate the facility and uses the CIWM/WAMITAB scheme to demonstrate suitability. The relevant person for the site has been named below and full details have been provided separately on the relevant application form (Form B2).

Technically Competent Manager: Mr Neil Trueman

Evidence of competency for hazardous waste transfer and hazardous waste treatment can be found as an Appendix to this application (Appendix 12).

### 3 MANAGING YOUR ACTIVITIES

Cumbria Waste Group’s activities are certified to the following standards:

- ISO45001: 2018 for Occupational Health & Safety Management
- ISO14001:2015 for Environmental Management
- ISO9001:2015 for Quality Management

Cumbria Waste Group is the parent company of Cumbria Waste Recycling Ltd and while the scope of each Management System does not currently extend to the Seal Sands HWTS, the scope of the EMS will be extended to include Seal Sands once the site has become operational. This will be reflected on the Certificates of Registration during the next external review cycle by the approved certification supplier.

#### 3.1 ENVIRONMENTAL MANAGEMENT SYSTEM

The EMS is employed in the effective management of environmental performance as it helps to maintain compliance with regulatory requirements and manage all other significant environmental impacts. This is a key requirement when in the process of ensuring all pollution prevention and control techniques are delivered reliably, monitored and measured appropriately, and on a combined basis.

Cumbria Waste Group has an ISO 14001: 2015 certified EMS that is been externally certified by Citation ISO Certification Limited and a copy of the latest certificate is included as an Appendix to this application. The EMS does not currently include Seal Sands HWTS within the scope of the EMS.

Additionally, summary guidance on the development of a management system to carry out activities under an environmental permit<sup>1</sup> specifies the following aspects are required:

**Table 3-1 – Environmental Management System Requirements**

GOV.UK Requirements	Proposed Arrangements	BAT?
<p>As part of the Environmental Management System guidance available on the GOV.UK website the following should be incorporated:</p> <p>You must include a <b>Site Infrastructure Plan</b> which highlights where the activities covered by an Environmental Permit are undertaken.</p>	<p>This permit applications includes site infrastructure plans which highlight the activities covered by the Environmental Permit that is being applied for. These site plans will be incorporated into the scope of the existing EMS which is certified to ISO 14001:2015 and covers Cumbria Waste Group’s existing sites.</p>	<p><b>Yes</b></p>

<sup>1</sup> [Develop a management system: environmental permits - GOV.UK](#)

<p>Your plan must also include:</p> <p>Buildings and other main constructions such as treatment plants, incinerators, storage silos and security fencing;</p> <p>Storage facilities for hazardous materials like oil and fuel tanks, chemical stores, waste materials;</p> <p>Locations of items for use in accidents and emergencies;</p> <p>Entrances and exits to be used by emergency services;</p> <p>Pollution control points, such as inspection and monitoring points;</p> <p>Trade effluent or sewage effluent treatment plants;</p> <p>Effluent discharge points; and</p> <p>Contaminated land, or land you believe is contaminated.</p>	<p>The infrastructure plans show:</p> <ul style="list-style-type: none"> <li>• Site buildings, tanks and structures;</li> <li>• Locations of where hazardous waste and hazardous raw materials, including the site diesel tank, are stored;</li> <li>• Locations of emergency equipment including spill kits, fire hydrants and fire extinguishers,</li> <li>• Locations of emergency services entrances/exits;</li> <li>• Discharge points to sewer and ground associated with the site operations;</li> </ul>	<p><b>Yes</b></p>
<p>The plan must also demonstrate areas which are vulnerable to pollution from the site, for example:</p> <p>Rivers or streams</p> <p>Groundwater used for drinking water</p> <p>Residential, commercial or industrial premises</p> <p>Areas where wildlife is vulnerable or protected</p>	<p>The infrastructure plans show the location of site in relation vulnerable receptors including:</p> <ul style="list-style-type: none"> <li>• Rivers and surface water features</li> <li>• Commercial and industrial premises</li> <li>• Protected habitat sites</li> </ul>	<p><b>Yes</b></p>
<p>Your plan must show foul and combined drainage facilities marked in red and surface water drainage facilities in blue. It must also show:</p> <p>The direction of flow of water in the drain;</p> <p>The location of discharge points to sewer, watercourse or soakaway;</p> <p>The location of manhole covers and drains; and</p> <p>The location of stop and diverter valves and interceptors.</p>	<p>Drainage plans for the site showing</p> <ul style="list-style-type: none"> <li>• Foul drainage facilities in red;</li> <li>• Surface water drainage facilities in blue;</li> <li>• The direction of flow;</li> <li>• The location of discharge points to sewer and soakaway; and</li> <li>• The location of drainage infrastructure.</li> </ul>	<p><b>Yes</b></p>
<p>Your plan must show the location of mains water, gas and electricity supplies on your site including:</p> <p>The mains water stop tap;</p> <p>Gas and electric isolating valves and switches; and</p>	<p>The site does not have a mains gas supply.</p> <p>The infrastructure plans show:</p> <ul style="list-style-type: none"> <li>• Locations of mains water supplies;</li> <li>• Locations of electricity supplies at the site;</li> </ul>	<p><b>Yes</b></p>

<p>The routes for gas, electricity and water supplies around the site.</p>	<p>Infrastructure plans will be updated during the lifetime of the site as surveys and upgrades are completed.</p>	
<p><b>Water discharge and groundwater activity</b></p> <p>If you are applying for a permit for a standalone water discharge activity or a point source standalone groundwater activity your site plan must show:</p> <p>Your wastewater treatment plant;</p> <p>Monitoring points - the locations from which you will take samples to check for contaminants or pollutant substances as required by your permit;</p> <p>The location of emergency equipment;</p> <p>The location of any mitigation measures referred to in your management system;</p> <p>The outlet to surface water (standalone water discharges only); and</p> <p>The infiltration system (standalone groundwater activity only).</p> <p>If you are applying for a permit for a standalone groundwater activity where you are land spreading, your site plan must show:</p> <p>The field locations for spreading;</p> <p>Monitoring points - the locations from which you will check your discharge for contaminants or pollutant substances as required by your permit;</p> <p>The location of emergency equipment; and</p> <p>The locations of any pollutant storage areas linked to your permit.</p>	<p>Not applicable</p>	<p>n/a</p>
<p><b>Site operations</b></p> <p>Break down the operations that will be carried out on your site during start up, normal operation and shut down, into a list of activities and processes, for example unloading waste, storing waste, incinerating waste.</p> <p>For waste, mining waste, and installations, list the wastes that will be produced by each activity or process.</p> <p>List the steps you will take to prevent or minimise risks to the environment from each activity or process and type of</p>	<p>The EMS will include all aspects of the site operations and existing processes and procedures will be reviewed and updated as necessary to ensure that all operations of the HWTS are undertaken in accordance with those of the EMS.</p> <p>CWR has existing policies for complying with legal and other obligations, managing change, managing documents, waste pre-acceptance, waste acceptance, handling and using hazardous substances, preparing and responding to emergencies and managing non-conformities.</p> <p>The site will have an Accident Management Plan and Aspects and Impacts Register which will identify</p>	<p>Yes</p>

<p>waste. Be specific about the actions you will carry out to do this.</p> <p>For water discharge and point source groundwater activities, this will normally be the operation of a wastewater treatment works or effluent treatment equipment that is part of your activity and included in.</p>	<p>environmental aspects and risks presented to these aspects. The site will utilise a number of different mitigations in order to minimise the risk to the environment from normal and abnormal events.</p> <p>For discharge of waste waters to sewer, the site will monitor the batch discharges in accordance with an agreement in place with Northumbrian Water Limited.</p>	
<p><b>Site operations for a business that manages, treats or disposes of waste</b></p> <p>If you are a waste operator you must include a waste storage plan that states:</p> <p>The longest amount of time that you will store each type of waste;</p> <p>How you will make sure you will not exceed these time limits – you need to consider your emissions when deciding how long you can store types of waste for;</p> <p>The maximum amount of each type of waste you will store in terms of volume;</p> <p>The maximum height of each storage pile on site;;</p> <p>How you will identify the specific types of waste you are storing</p> <p>How you will separate different types of waste if required, for example how far apart you will keep waste types that cannot be mixed; and</p> <p>How you will make sure your site only takes waste that your permit allows you to store.</p>	<p>Details of waste storage will be in accordance with the Environmental Permit that will be issued to the site.</p> <p>The maximum duration that waste will be stored at the site is defined within the Environmental Permit and the Fire Prevention Plan.</p> <p>All waste is subject to pre-acceptance and acceptance procedures and information gathered at these stages in stored electronically. All wastes are given unique reference number at the waste pre-acceptance stage which is utilised if the waste is accepted at the site. Once accepted at the site, waste is logged on an electronic waste tracking system which is able to identify where a waste is located on site, report the total quantity of waste held on site at any one time, report on the breakdown of hazardous waste types on site (by hazardous property), provide a comparison of the quantities of waste on site compared to quantities permitted by this Environmental Permit and report on the time a waste has been on site in relation to the time permitted by the Environmental Permit.</p> <p>Waste storage and segregation requirements are in accordance with HSG71 and staff are fully trained to ensure that they understand which waste types can be accepted at the site through the pre-acceptance and acceptance procedures.</p>	<p><b>Yes</b></p>
<p><b>Fire prevention plans (FPP)</b></p> <p>If you need a permit for waste activities and you plan to store combustible waste you will need to write a fire prevention plan and submit it with your application. This must explain how you would prevent fire at your site or manage risks from fire if one occurs. Read the fire prevention plan guidance for more information on how to do this.</p>	<p>The site will store combustible waste and has a Fire Prevention Plan.</p> <p>This Fire Prevention Plan has been to assist in the overall environmental performance of the site in minimising the likelihood of a fire happening. This plan takes into account Environment Agency guidance on Fire Prevention Plans for Environmental Permits.</p>	<p><b>Yes</b></p>
<p><b>Site and equipment maintenance plan</b></p> <p>You need a plan for how you will maintain the infrastructure of your site and any machinery.</p>	<p>CWR uses an electronic system for audits and inspections of site plant and equipment which includes daily, weekly and monthly inspections.</p> <p>Site staff are supported by external approved suppliers to under take maintenance which is</p>	<p><b>Yes</b></p>

<p>You must maintain any machinery according to the manufacturer's or supplier's recommendations (for example, following the instructions and guidelines of any manuals that came with your equipment).</p> <p>You will need to record each time you carry out maintenance, for example, each time you check the calibration of monitoring equipment to make sure it meets the manufacturer's recommendations.</p>	<p>completed in accordance with manufacturer's recommendations.</p> <p>A written procedure for the HWTS's inspection regime and Planned Preventative Maintenance Programme for all plant and equipment will be developed and implemented through the EMS.</p>	
<p><b>Contingency plans</b></p> <p>You need a plan for how you will minimise the impact on the environment of any:</p> <p>Breakdowns;</p> <p>Enforced shutdowns; and</p> <p>Any other changes in normal operations, for example due to extreme weather.</p>	<p>The company has an existing Business Continuity Plan which will be extended to include the HWTS.</p> <p>Aspects of how the site will plan to minimise the impacts on the environment from breakdowns and abnormal events are also included within the Accident Management Plan.</p>	<b>Yes</b>
<p><b>Accident prevention and management plan</b></p> <p>You need a plan for dealing with any incidents or events that could result in:</p> <p>Pollution; and</p> <p>Not being able to comply with your permit.</p> <p>The plan must identify potential accidents, for example:</p> <p>Equipment breakdowns;</p> <p>Enforced shutdowns;</p> <p>Fires;</p> <p>Vandalism;</p> <p>Flooding; and</p> <p>Any other incident which causes an unexpected change to normal operations, such as extreme weather</p> <p>For each potential incident, it must also state the:</p> <p>Likelihood of the accident happening;</p> <p>Consequences of the accident happening;</p> <p>Measures you'll take to avoid the accident happening; and</p>	<p>The site will have an Accident Management Plan which plans for incidents and events including:</p> <ul style="list-style-type: none"> <li>• Acceptance of non-conforming wastes</li> <li>• Spillages</li> <li>• Failure of site infrastructure</li> <li>• Accidental mixing of non-compatible wastes</li> <li>• Fire events</li> <li>• Break down of equipment</li> <li>• Vehicle collisions and accidents</li> <li>• Vandalism</li> <li>• Flood events</li> <li>• Extreme weather</li> <li>• Loss of external power</li> </ul> <p>The Accident Management Plan identifies the:</p> <ul style="list-style-type: none"> <li>• Probability of the occurrence an event</li> <li>• Consequence of an event occurring and the harm it may cause</li> <li>• Risk management measures to reduce the likelihood of an event occurring or minimise the impact of an event where it to occur.</li> </ul>	<b>Yes</b>

<p>Measures you'll take to minimise the impact if the accident does happen.</p> <p>Your accident plan must also say how you will record, investigate and respond to accidents or breaches of your permit.</p> <p>Your accident plan must also include:</p> <p>The date it was last reviewed;</p> <p>When it will next be reviewed;</p> <p>A list of emergency contacts and how to reach them;</p> <p>A list of substances stored at your site, and your storage facilities; and</p> <p>Forms to record accidents on.</p> <p>Consider taking the following actions, if you think they are relevant to the operations you carry out at your site:</p> <p>Make emergency services aware of your activities;</p> <p>Take out insurance to cover the cost of clean up following an accident;</p> <p>Check whether you're in a flood risk area and sign up for flood warnings; and</p> <p>Develop a system to allow access to important information away from your site.</p>	<p>CWR records incident/accident occurrences that occur at the installation on the internal company reporting Near Miss / Incident / Accident reporting and tracking system. This records all of the necessary information.</p> <p>The Accident Management Plan includes:</p> <ul style="list-style-type: none"> <li>• The date it was last reviewed;</li> <li>• When it will next be reviewed;</li> <li>• A list of substances stored at your site, and your storage facilities; and</li> <li>• A list of emergency contacts and how to reach them;</li> </ul>	
<p><b>Contact information for the public</b></p> <p>If you have a waste or installations permit you must display a notice board at or near the site entrance telling the public about the site. It must include:</p> <p>The permit holder's name (company name at least);</p> <p>An emergency contact name and telephone number;</p> <p>A statement that the site is permitted by the Environment Agency;</p> <p>The permit number; and</p> <p>Environment Agency telephone number 03708 506506 and the incident hotline 0800 807060 (or another number they subsequently tell you about in writing)</p> <p>A notice board is optional for other permits and will depend on whether you consider that the public will need to see emergency contact information at your site.</p>	<p>Contact information for the public that meets this requirement, including how to contact the site or the company are included on the notice board which will be displayed at the site entrance. Details for how to contact the Environment Agency will also be included on this notice board.</p>	<p><b>Yes</b></p>

<p><b>A changing climate</b></p> <p><b>If your permit was issued:</b></p> <p><b>on or after 1 April 2023, you need to integrate climate change adaptation planning into your management system</b></p>	<p>CWR considers the impacts of climate change within the current management system.</p>	<p><b>Yes</b></p>
<p><b>Complaints procedure</b></p> <p>You need a procedure that records:</p> <p>Any complaints you receive in relation to activities covered by your permit (for example complaints from neighbours about noise, odour or dust from your site);</p> <p>How you investigate those complaints; and</p> <p>Any actions taken as a result of complaints.</p>	<p>CWR has a complaints procedure as part of the company management system that is available on the public website.</p> <p>Complaints received by the site in relation of operations of the HWTS will be recorded on the company Near Miss / Incident / Accident reporting and tracking system.</p> <p>When an external complaint is received, CWR will aim to acknowledge the complaint within 24 hours or on the next working day. All complaints will be investigated promptly, and any immediate appropriate remedial action will be taken. CWR will aim to respond to all enquiries within 5 working days.</p>	<p><b>Yes</b></p>
<p><b>Managing staff competence and training records</b></p> <p>You need to have enough staff and resources to make sure the site is run effectively in order to comply with your permit.</p> <p>Your management system needs to explain who is responsible for what procedures and who is technically competent.</p> <p>For each of your managers, staff and contractors make a list of any roles they carry out that relate to activities covered by your permit.</p> <p>You will also need a procedure to:</p> <p>Check your staff and contractors have taken the training or qualifications required for the work they do; and</p> <p>Record any training, refresher training or qualifications taken by your staff or contractors</p> <p>If you have a permit for a waste, mining waste or installations permit you also need to look at legal operator and competence requirements.</p>	<p>Operations of the HWTS will be managed by a Technically Competent Manager.</p> <p>CWR assigns role and responsibilities for its employees and provides sufficient information, instruction, supervision and training to employees to allow them to achieve the requirements of company policy.</p> <p>All staff at the HWTS will be assessed for competence by the Transfer Station Manager and records of training and competency will be held electronically and updated as staff receive additional training.</p>	<p><b>Yes</b></p>
<p><b>Keeping records</b></p>	<p>CWR has a procedure for managing documents and keeping records. This procedure specifies the minimum requirements and responsibilities for</p>	<p><b>Yes</b></p>

<p>You must keep any records required by your permit. In some cases the permit will tell you how long to keep a record for. Otherwise you must consider how long you'll need to keep different records for (and write this in your management system).</p> <p>You must keep records to show how your management system is being implemented in line with the requirements of your permit and this guide.</p> <p>You need to keep:</p> <ul style="list-style-type: none"> <li>Permits issued to the site;</li> <li>Other legal requirements;</li> <li>Your risk assessment;</li> <li>All management system plans;</li> <li>Any plans required by the application or permit depending on your type of activity (for example odour management plan at waste sites);</li> <li>All operating procedures;</li> <li>Staff competence and training (for example qualifications, courses attended);</li> <li>Emissions and any other monitoring undertaken (for example water samples);</li> <li>Compliance checks, findings of investigation and actions taken;</li> <li>Complaints made, findings of investigation and actions taken;</li> <li>Audits of management system, findings (reports) and actions taken;</li> <li>Management reviews and changes made to the management system; and</li> <li>Where applicable, certification audit reports and any actions carried out.</li> </ul> <p>You also need to include copies of your plans with your management system if:</p> <p>Your permit requires you to implement an approved plan.</p> <p>you have been asked to do this because there's a problem at your site</p>	<p>the management of documents during their life cycle.</p> <p>Documents are maintained electronically, and managers are updated automatically when a controlled document has been reviewed and updated so that changes can be communicated to staff.</p> <p>Waste documentation is retained in accordance with legal requirements under duty of care.</p> <p>Documents associated with the permit will be retained in accordance with the requirements of the Environmental Permit when it is issued and in accordance with legal requirements. Waste tracking records are maintained electronically and backed up weekly at an off site location; all information is kept for a minimum of two years after the waste has been removed from the site.</p>	
<p><b>If you manage, treat or dispose of waste</b></p>	<p>CWR's electronic waste tracking system links every job from quotation to pre-acceptance, acceptance and storage with a full inventory showing what is in</p>	<p><b>Yes</b></p>

<p><b>If you are a waste operator you must record the following for each delivery of waste to your site:</b></p> <p>Its quantity (weight or volume);</p> <p>Its List of Waste (LoW) Code;</p> <p>Its origin (for example, the location the waste sent from);</p> <p>The identity of the producer of the waste (for example the company name);</p> <p>The date the waste arrives at your site;</p> <p>The date the waste was first produced, if the waste is likely to cause odour; and</p> <p>Any quarantined materials that are part of the delivery, and what you did with them.</p> <p>You must also:</p> <p>Keep records to show that you are meeting your duty of care requirements as a business that produces waste; and</p> <p>Comply with the site record and return requirements for hazardous waste</p>	<p>stock and when/where it is sent showing full cradle to grave. It is stored on the company server which has an automated back up system and allows access from a secure VPN system over the internet to authorised members of staff with remote access. The waste tracking system is utilised by CWR at existing sites and incorporates all of the requirements in order to record deliveries to the site, track their location/quantity on site until they are removed from the site for transfer to an offsite location.</p> <p>Any paper documents are retained on site with the administrators.</p>	
<p><b>Waste, mining waste or installations</b></p> <p>If you have a permit for waste, mining waste or installations you will need to <a href="#">have a site condition report</a> to record the condition of land or quality of groundwater on your site.</p> <p>Keep this up to date through the life of your permit and include the following information:</p> <p>Details of any historic spills or contamination (incidents that took place before you began operating) and what was done in response to those incidents; and</p> <p>Evidence of the effectiveness of any measures you have taken to protect land or groundwater since you started operating.</p> <p>If you want to cancel (surrender) your permit you will need to show you have taken the necessary measures to avoid any pollution risk from your activities.</p> <p>You also need to show that you have returned the site to a satisfactory state. This means that the condition of land and</p>	<p>This application includes a Site Condition Report which records the condition of the land and quality of the ground water at the site, including the historical uses of the site which may have resulted in contamination.</p> <p>The application also includes:</p> <ul style="list-style-type: none"> <li>• An odour management plan;</li> <li>• An fugitive emissions management plan;</li> </ul>	<p><b>Yes</b></p>

<p>groundwater has not deteriorated as a result of your activities.</p> <p>Sites for waste, mining waste or installations may have to include the following plans:</p> <p>An odour management plan;</p> <p>An emissions management plan;</p> <p>A noise and vibration management plan; and</p> <p>A pests management plan.</p>		
<p><b>Review your management system</b></p> <p>You must have a procedure for checking you are complying with your permit, procedures and management system. Record what checks are carried out, who did them and what action was taken.</p> <p>You must review and update your management system:</p> <p>When you make changes to your site, operations or equipment that affect the activities covered by your permit, for example if you install a new boiler;</p> <p>Whenever you apply to change ('vary') your permit;</p> <p>After any accident, complaint or breach of your permit; and</p> <p>If you encounter a new environmental problem or issue, and have implemented new control measures to control it.</p> <p>You must keep a record of changes to your management system, particularly major changes such as:</p> <p>A change to the maximum amount of waste stored on your site;</p> <p>A new noise screen;</p> <p>New waste treatment equipment, for example a Trommel;</p> <p>Implementation of new control measures; and</p> <p>The Environment Agency may also review your management system and make recommendations for improvements after any accident, permit breach or other incident. It may also ask you to improve your management system if it thinks you have not identified or minimised risks from pollution.</p>	<p>The company management system is supported by the senior management of the company and subject to regular external and internal review.</p> <p>Where a review of the management system identified an opportunity for continuous improvement or where there is a significant change at the site, the management system is reviewed and updated accordingly.</p> <p>The management system and specific Work Instructions will also be reviewed following an incident that results in a pollution incident or a near miss that could have resulted in a pollution incident.</p>	<p><b>Yes</b></p>

<p><b>Site closure</b></p> <p>You will have a period of site closure from when you stop operating until you are able to cancel (surrender) your permit if you have a permit for a:</p> <p>Landfill; and</p> <p>Category A mining waste facility.</p> <p>During this time you will need to continue to monitor emissions from your site.</p> <p>You will need to submit the site closure parts of the <a href="#">site condition report</a> when you stop operating.</p> <p>Make sure people understand what you do.</p> <p>Your staff must have access to and understand any sections of the management system that deal with activities they carry out. It is up to you how you do this, for example whether you print the system out, or provide electronic copies.</p> <p>You must be able to show the Environment Agency your management system if asked. If you have an overarching management system for a number of sites you can provide both:</p> <p>An overview or summary of the whole system; and</p> <p>Copies of the sections that relate to the activity type or aspect of the management system that the Environment Agency has asked about.</p> <p>Consider whether you need to provide information to interested parties such as neighbours and your local community to explain how you manage your activities to comply with your permit.</p>	<p>The site is not a landfill or category A mining waste facility</p>	<p><b>Yes</b></p>
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### 3.2 WASTE PRE-ACCEPTANCE AND WASTE ACCEPTANCE

As per the general requirements of BAT and Appropriate Measures (and with reference to Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste), CWR has set up and implemented Working Instructions (procedures) on the characterisation and pre-acceptance of waste, and, waste acceptance for the Seal Sands HWTS.

This ensures that waste delivered to the site is technically suitable for acceptance at the site and that the site is allowed to accept the waste, as per the EWC codes listed within Table 5-1 of Section 5 Waste management, and conditions of this Environmental Permit.

## WASTE PRE-ACCEPTANCE

CWR's Pre-acceptance of Hazardous and Non-Hazardous Wastes procedure (WI114, Issue 12) can be found in Appendix B. The objective of this procedure is to prevent the acceptance of unpermitted or unsuitable wastes which may lead to adverse reactions or uncontrolled emissions and that wastes are subject to suitable technical appraisal in accordance with WM3.

Upon receipt of an enquiry from a CWR customer, a sales representative will obtain written details via a Waste Producer Declaration Form (WPDF), chemical analysis or Material Safety Data Sheet (MSDS) from the customer to classify the waste in accordance with WM3; information is vetted by an appropriately qualified member of staff to ensure the sales representative has gathered all the necessary information. The WPDF will include sufficient information in order to appraise the customer's own classification and assessment of the waste. Where required, CWR will also obtain a representative sample of the waste for chemical analysis. Representative samples will always be requested for waste oils from sites other than low risk garages, workshops and premises generated waste that is likely to be similar each time a consignment is collected.

Once all of the information has been received, it will be assessed by a technically qualified person who will decide if further analysis is required of the representative sample. If further analysis is required, this will be requested via the CWR sampling laboratory and Chemist using the Waste Pre-Acceptance Sample form, who will undertake a range of checks including but not limited to: acidity and alkalinity, presence of contaminants/pollutants and flashpoint. Waste samples are assigned a unique reference number to track the material through its life and enable cross-referencing with accepted wastes from subsequent incoming loads.

Following completion of the WPDF and any chemical analysis, a technical assessment will be completed by a qualified technical assessor (qualified to HNC Chemistry or equivalent) to confirm the waste is suitable for acceptance at Seal Sands HWTS. The Transfer Station Manager subsequently approves the delivery to the site and if the waste can be accepted, a booking process can commence and all documents (including the WPDF and Waste Pre-Acceptance Sample form) will be filed electronically within a customer folder for audit and traceability purposes. If a waste cannot technically be accepted or the site capacity is unavailable to accept a waste, the waste will not pass the pre-acceptance stage and the booking process will not commence.

Records raised by an enquiry are retained for a minimum of three years and samples are retained for a minimum of three months or until the material has left the site (whichever is the longer duration).

Where consistent waste streams from the same waste producer are regularly received at Seal Sands HWTS, waste pre-acceptance information can be reviewed on an annual basis. For all other wastes, pre-acceptance sampling and analysis will be completed on each individual load.

## WASTE ACCEPTANCE

CWR's Procedure for hazardous waste DTS & Non-Haz Liquid Wastes for Treatment Plant (WI112, Issue 11) can be found in Appendix B. The objective of this procedure is to ensure wastes arriving at Seal Sands HWTS conform to the characteristics identified during the pre-acceptance stage and that conditions of the environmental permit are complied with. This procedure identifies the verification checks required on waste arriving at Seal Sands and rejection criteria for non-conforming wastes based on the following stages:

1. **Booking Acceptance:** If a waste passes the waste pre-acceptance stage and the customer wishes for CWR to accept the waste, the Seal Sands HWTS Office will receive a fully completed Pre-acceptance form listing all of the waste materials to be collected and with a minimum notice period of 48 hours. Where all the information is available and correct and where there are suitable resources available to accept the waste (e.g. available space), the customer will be allocated a booking at the HWTS but if information is incomplete, further information will be requested.
2. **Load Arrival:** On arrival, a waste load is weighed at the weighbridge and accepted if sufficient resources are available at Seal Sands to accept the waste. This includes but is not limited to: sufficient storage capacity, sufficient treatment capacity (if applicable) and sufficient, suitably trained staff. All waste paperwork is checked and approved and all labelling of containerised wastes relates to the contents. Any old labels that do not relate to the contents are removed prior to the waste being accepted. The waste is received under the supervision of a suitably qualified person.
3. **Load Inspection:** prior to being offloaded, each load is inspected to check for labelling of waste packages, that the quantities received agree with accompanying waste paperwork and all containers are secure with well fitting lids and bungs. Where it is not possible to inspect a load prior to it being offloaded from the vehicle, the inspection will take place during the offloading process. Where a container has a damaged label, this will be replaced. The load is offloaded into the waste reception area, the acceptance sheet for the booking is completed and information is inputted onto the electronic acceptance and analysis sheets that were generated from the pre-acceptance stage.

Damaged or unlabelled containers that are unloaded from the vehicle are placed immediately into the quarantine area of the site, located inside of the main Warehouse and adjacent to the site weighbridge/site entrance. Waste materials placed into the quarantine area are marked with tape and labelled with a unique reference number followed by the letter "Q".

4. **Sampling:** all waste accepted at Seal Sands (unless pure, unused/uncontaminated chemical product wastes) is subject to visual checks, sampling and testing. All containerised wastes are subject to visual checks against waste pre-acceptance information and representative sampling. Containers which deviate from pre-acceptance information will be sampled and tested individually via the on site laboratory. The results of any testing is recorded on the Waste Acceptance Analysis Form by the Chemist undertaken the tests, with anomalies discussed with the Transfer Station Manager to decide on the appropriate action.

Containers are normally offloaded by fork-lift truck and placed into the waste reception area but incompatible waste materials will be segregated and placed into a separate bunded area. If a waste is sampled and then placed into the quarantine area, it is marked with tape and labelled with a unique reference number followed by the letter "Q".

Rejected wastes following sampling are rejected in accordance with procedure WI055 "Non Conforming Waste Loads".

5. **Records and Traceability:** the Seal Sands waste tracking system holds all of the information generated during the pre-acceptance, acceptance, storage and removal from site stages to follow the waste through its journey based on the unique reference number assigned at the

waste pre-acceptance stage. The waste tracking system is able to identify where a waste is located on site, report the total quantity of waste held on site at any one time, report on the breakdown of hazardous waste types on site (by hazardous property), provide a comparison of the quantities of waste on site compared to quantities permitted by this Environmental Permit and report on the time a waste has been on site in relation to the time permitted by the Environmental Permit. Records are maintained electronically and backed up weekly at an off site location; all information is kept for a minimum of two years after the waste has been removed from the site.

6. Non-conformances and waste rejection; during the inspection of a load or during sampling, some or all of the waste may not conform with this Environmental Permit and the waste will be rejected from the site. Where this occurs, a non-conformance report is raised by the Chemist supervising the unloading and the non-conformance report is sent to the Transfer Station Manager, is logged and appropriate action is taken. Appropriate action could include acceptance with remedial actions, redirection of part of or all of the consignment, or rejection from Seal Sands of part of or all of the consignment. Where waste is rejected, Part E of the Hazardous Waste Consignment Note will be completed to indicate the waste has been rejected, the producer will be informed and the Environment Agency will be informed. Rejected wastes will be removed from the site within five working days (if they have been placed into the site quarantine area).
7. Waste acceptance: where the preceding six steps do not raise grounds for rejection or quarantining of a waste, the waste will be accepted at Seal Sands HWTS into the appropriate area as dictated by the hazardous properties of the waste. This decision will be reached by a suitably qualified member of site staff, e.g. a Chemist or the Transfer Station Manager.
8. Emergency acceptance: if a waste is required (by the Environment Agency or emergency services, or by a Legal Notice) to be accepted in an emergency, it may not be possible to undertake all pre-acceptance procedures and some waste acceptance procedures (in steps 1-8) above may not be possible. In this situation, CWR will take all steps possible under the circumstances to ensure the waste is accepted in a manner which will minimise environmental impacts and maintain safety. The Environment Agency will be informed of the details of the situation as soon as reasonably practicable.

## **LABORATORY SMALLS WASTE PRE-ACCEPTANCE AND ACCEPTANCE**

For waste consisting of laboratory smalls (that is, wastes from laboratories in containers of less than 5 litres), a representative sample may not be needed. However, a full copy of the list of laboratory smalls and the packing lists is required for both laboratory smalls packed by CWR staff and laboratory smalls packed by third parties. These must comply with CWR's procedure (WI104).

Upon acceptance of laboratory smalls waste, no later than one day after acceptance, each package is opened and checked to ensure wastes are correctly packaged and that none are damaged. They are also checked to confirm the packing list is present. If suitable, waste is accepted and placed into segregated storage within main Warehouse (or dedicated Flammable Yard Storage or Secure Storage). If laboratory smalls wastes need to be repackaged, for example due to damage or



incompatibility, this will be done immediately within the site Bulking and Repackaging Workshop, which is the site's dedicated repackaging area

## **WASTE OILS PRE-ACCEPTANCE AND ACCEPTANCE**

For waste consisting of waste oils, including mixtures of waste waters containing oils, waste will be pre-accepted as above including providing a representative sample at the pre-acceptance stage. On arrival, tankers will be directed to the sampling gantry, located within the Rear Yard, where they will be subject to sampling, checking and testing as per the following steps:

1. Staff will request and view the tanker "wash-out" certificate or declaration to confirm there is no risk of cross-contamination from previous loads carried by the tanker.
2. A core sample is taken from the top hatch using a dip tube which is slowly immersed into the tank until it reaches the bottom of the tanker. A valve is closed and the tube removed so that a visual observation can be made of the full cross section. Sampling is completed by CWR staff who are competent and trained in carrying out this procedure. Sampling provided by the tanker driver will not be acceptable.

Waste is then transferred to a sample bottle, the bottle labelled and transferred to the onsite laboratory for analysis.

3. Upon completion of the sampling, the tanker is authorised to discharge the waste and sampling analysis results are detailed on the Waste Acceptance Analysis Form. The sample is retained for a minimum of two days after the treatment of the waste or the removal of the waste from the site.

## **CLINICAL AND HEALTHCARE WASTE PRE-ACCEPTANCE AND ACCEPTANCE**

The only clinical waste accepted at Seal Sands HWTS is clinical sharps that are suitably packaged in type-approved sharps container; the site does not accept other types of infectious wastes. The site will also accept waste pharmaceuticals, waste chemicals and dental amalgam from healthcare and/or related research sources. These wastes will be segregated by the waste producers and accepted in suitable colour coded waste containers.

Healthcare wastes from Chapter 18 of the List of Wastes, will be pre-accepted at the site as above and additionally, waste producers will be provided with advice about segregation and waste packaging that conforms with the information and colour-coding of Health Technical Memorandum 07-01: Safe and sustainable management of healthcare waste. The waste producer will also be required to provide a valid copy of their own Clinical Waste Pre-acceptance Audit report so that a suitably qualified sales representative can technically assess the information and make sure healthcare wastes can be accepted in accordance with the permit conditions. Where required, a technical assessment will be completed by a qualified technical assessor (qualified to HNC Chemistry or equivalent) to confirm the waste is suitable for acceptance at Seal Sands HWTS. The Transfer Station Manager subsequently approves the waste for delivery to the site.

If waste is received following an enquiry, records will be retained for a minimum of three years for each waste producer of the:

1. Waste Producers Clinical Waste Pre-Acceptance Audit report
2. CWR's assessment of the audit report
3. Additional information received

#### 4. CWR's assessment that the waste is suitable for acceptance at Seal Sands HWTS.

Upon delivery of healthcare waste, waste will be accepted as per Working Instruction WI112, as above for Booking Acceptance and Load Arrival. Additionally, CWR staff will undertake additional Load Inspection including visual checks of wastes by reference to the appropriate colour coded waste packaging in bulk containers for identification of any non-conforming items. The Sampling stage of WI112 is omitted except for this visual check and none of the primary packaging will be opened or the wastes inside tested. For wastes passing the acceptance checks, wastes are moved to the segregated storage within the main Warehouse and placed onto racking. Healthcare wastes accepted inside of type-approved wheeled bins are moved to the main Warehouse and the lid to the waste cart remains closed. Information will be recorded as per the details included within Records and Traceability above for the waste.

Non-conforming healthcare wastes is placed into the dedicated the quarantine area of the site, located inside of the main Warehouse and adjacent to the site weighbridge/site entrance and is removed from site within 5 working days, as per WI055 "Non-Conforming Waste Loads" and are marked with tape and labelled with a unique reference number followed by the letter "Q".

### **WASTE TRACKING**

An electronic waste tracking system used at Seal Sands HWTS is already used by CWR. Waste tracking records commences during the waste pre-acceptance stage when a potential customer makes an enquiry about a waste type and a unique reference number assigned. Following confirmation by the customer that they wish to proceed and subsequent stages of waste acceptance, storage and removal off site, the waste tracking system will utilise this unique reference number to update the record of where a waste is located. The waste tracking system will also show details of non-conformances, rejection, repackaging and treatment, as allowed by the Environmental Permit and required by the waste consignment. The waste tracking system holds the following information:

The date the waste arrived at the site

The producer details

The unique reference number

Waste pre-acceptance information and acceptance analysis and results

Waste package type and size

The intended treatment/disposal route

Where the waste is located on site (by hazardous category); and

Identification of any staff who have taken decisions relating to acceptance, rejection, recovery and disposal options.

The electronic waste tracking system is able to report the following:

Total quantity of waste held on site at any one time

Breakdown of hazardous waste types on site (by hazardous property)

Indication of where waste is located on site by reference to the site plan

Comparison of the quantities of waste on site in relation to quantities permitted

Comparison of time waste has been on site in relation to time permitted.

For clinical waste, the tracking allows loose packaged items to be tracked back to the original consignment received at the facility.



Records are maintained electronically and computer records are backed up weekly onto the CWR Head Office computer system, which is an off site location. All information relating to a waste consignment is kept for a minimum of two years after the waste has been removed from the site. Where documents are required to be kept for longer than two years, for example Hazardous Waste Consignment Notes, these are kept for longer than two years.

### **3.3 EFFICIENT USE OF RAW MATERIALS AND WATER**

#### **RAW MATERIALS**

The HWTS will consume a small number of raw materials to maintain the safe operations of the site and provision of waste management services to their customers. As per the following Raw Material Inventory (Table 3-2), raw materials used on site will be stored in either large volume containers (1,000 litre IBCs) that are provided with portable bunds or within smaller (<25 litre/kg) containers that are stored inside of dedicated, locked cabinets. Site staff will be provided with necessary personal protective equipment (PPE) so that they can perform their duties in a safer manner and this will generate volumes of waste PPE and packaging that will be disposed of appropriately via licensed waste facilities. All suppliers that CWR utilises for the provision of waste management services are audited for quality purposes and to confirm duty of care requirements are being discharged. The HWTS will also require suitable supplies of inert absorbent packaging materials for transporting some of the waste. Use of vermiculite (and materials with similar properties) will result in the disposal of waste of a proportion of this material but site staff will be assessed for competency and trained to use minimal amounts to achieve the required level of packaging protection, so as to reduce quantities that are used.

Raw materials storage is located on impermeable ground and the site is kerbed so that spillages are contained. Spill kits are located in close proximity to raw material storage in the event of a spillage and CWR's staff will follow on site Working Instructions to safely contain a spillage and dispose of the contaminated materials appropriately. The site may also store small volumes of miscellaneous paints and oils associated with the maintenance of buildings and vehicles.

The site also utilise a number of re-useable containers including bulk tankers (ranging in volume from 10,000 litres to 25,000 litres), 2-wheeled and 4-wheeled bins, drums (of various sizes/volumes) and IBCs and will prioritise opportunities to re-use containers. Where re-use is not possible, single use containers may also be sourced to ensure safe and compliant transfers of waste to off-site locations.

CWR regularly reviews the use of raw materials used and may choose to substitute the items identified below. Raw material selection is subject to change, based on factors not limited to; availability of supply, sustainability factors, selection of approved suppliers and cost and aligns with CWR's Safety, Health, Environmental & Quality (SHEQ) Policy to ensure the health, safety and welfare of employees and safeguarding the environment. Raw materials will be purchased from approved suppliers to provide a quality assurance and control the content of raw materials used on site.

**Table 3-2 - Raw Material Inventory**

Raw Material Name	CAS / EC Number	Storage Type	Storage Volume	MSDS No.
Diesel	68334-30-5	Self bunded diesel tank	2,000 litres	1
Calcium hydroxide	1305-62-0	25 KG sacks	1 tonne	2
Sodium hydroxide	1310-73-2	Bunded 1,000 litre IBCs	5,000 litres	3
Antifoam	n/a	200 litre containers stored in a bunded container	400 litres	4
Vermiculite	n/a	Inside of a building	4,000 litres	n/a
Sodium carbonate	497-19-8	25 KG sacks inside of main Warehouse	250 kg	5
Waste containers	n/a	Empty containers stored within yard	Various sizes of containers	n/a

**Table 3-3 – Estimated Raw Material Use and Hazards**

Material and Composition	Use of Material	Approximate Annual Use	Hazard Statements	Environmental Impact (where known) e.g. degradability, toxicity	Suitable Alternative for those with Significant Impact Potential / Justification
Diesel	Fuel for fork-lift trucks	c. 20,000 litres	<p>H226 flammable liquid and vapour.</p> <p>H304 aspiration hazard.</p> <p>H315 causes skin irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H351 Suspected of causing cancer.</p> <p>H373 May cause damage to organs through prolonged or</p>	<p>If discharge to the environment, can cause contamination of groundwater, surface water and soil.</p> <p>Can be harmful to aquatic life with long lasting effects.</p>	<p>Fork lift trucks are standard equipment used by CWR to transfer waste containers. Diesel is a standard fuel source.</p> <p>Use of electric powered fork lift trucks is considered depending on factors including durability and</p>

Material and Composition	Use of Material	Approximate Annual Use	Hazard Statements	Environmental Impact (where known) e.g. degradability, toxicity	Suitable Alternative for those with Significant Impact Potential / Justification
			repeated exposure. H411 Toxic to aquatic life with long lasting effects.		flexibility compared with internal combustion engines.
Calcium hydroxide	Used within waste treatment techniques	Less than 25 tonnes	H315: Causes skin irritation. H318: Causes serious eye damage. H335: May cause respiratory irritation.	Should not be allowed to enter drains. Forms a very alkaline solution.	Used for pH adjustment and is a known substance with many industrial uses within the waste industry.
Sodium hydroxide	Used within waste treatment techniques	Less than 250 tonnes (equivalent to maximum of 1 tonne per day)	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.	Substance is hazardous to water and should not be released to sewer or surface waters in an undiluted form.	Used for pH adjustment and is a known substance with many industrial uses within the waste industry.
Antifoam	To reduce incidents of foaming	5 tonnes	Not hazardous	Disposal of substance to surface water drains should be avoided	Substance is non-hazardous and used widely within waste treatment to reduce foaming incidences.
Vermiculite	Packaging material	Use is dependent upon type of waste packing jobs.	Not hazardous	Not applicable	Standard packaging material used within waste industry due to its properties.
Sodium carbonate	Used to neutralise spills of acidic substances	5 tonnes	H319 Causes serious eye irritation	Substance should not be released to drains	Can be safer to use than other strong bases to neutralise a spillage. Other substances may require

## **WATER**

The HWTS will not consume significant quantities of water which will be used for routine cleaning operations of the site and used within waste treatment. The site will capture and utilise surface water run-off for cleaning operations and waste treatments. The site will re-circulate cleaning water where possible in order to minimise the amount of water consumed.

The wider site will use potable water for staff welfare facilities which are not part of the scope of this Environmental Permit application.

Regular planned and preventative maintenance of the facility, in accordance with the preventative maintenance programme will minimise losses from the site and reduce consumption of water. Consumption of water will be reviewed in line with the company EMS and as a result of internal audits. Areas for continuous improvement will be identified and implemented, as appropriate to minimise water consumption and improve the efficient use of water at the facility.

### **3.4 ENERGY USE**

The facility will require the use of energy to operate safely and to carry out waste treatment activities. The main source of energy will be electricity from the mains supply.

As the site is new there have been opportunities to purchase energy efficient equipment that will reduce the consumption of electricity over the lifetime of the site and CWR will look for opportunities to invest in equipment with greater energy efficiency as the site grows. The main opportunity for energy efficiency has been to install highly efficient LED lighting for both wider site and security lighting but also task lighting inside of buildings. Good housekeeping of the site and following a programme of planned and preventative maintenance will contribute towards using energy efficiently at the site. It is anticipated that the energy consumption of the site will increase proportionally with the volumes of waste handled.

CWR will monitor the use of energy at the site to check that energy is being used efficiently and review usage patterns. This will be essential as the operations grow in order to select the most appropriate equipment with low energy consumption/high energy efficiency. CWR records electricity meter readings at all sites on a fortnightly basis to enable the company to review use and trends at all sites. This helps provide opportunities to identify energy savings and implement energy efficiency measures and will be undertaken on an annual basis (as a minimum).

Consumption of energy, including electricity and diesel will be reviewed in line with the company EMS and as a result of internal audits. The company will review the energy efficiency of its operations to identify areas for improvement, where energy can be used more efficiently or where improvements can be made to the consumption of fuel that will lead to an overall environmental improvement. For example, the company will continue to look at the use of electrical powered vehicles to replace internal combustion engines.

There will be no back-up power from standby generators.

### **3.5 AVOIDANCE, RECOVERY AND DISPOSAL OF WASTES**

The facility will generate limited quantities of waste materials for recovery and disposal from the operations of the site. Quantities of PPE and packaging will be disposed of from the safe handling of wastes accepted by the site which require handling and treatment. The operations of the site will also generate waste packaging that cannot be cleaned or waste containers that are damaged and



unable to be repaired for re-use. In the event that PPE, packaging or waste containers require disposal, they will be classified appropriately and transferred to suitably licensed waste facilities.

The site will prioritise the transfer of wastes to offsite recovery facilities ahead of disposal facilities, in accordance with the requirements of the waste hierarchy. However, some hazardous wastes generated by both day-to-day operations (and waste accepted at the site from customers) is likely to require disposal to landfill.

## 4 EMISSIONS MONITORING

### 4.1 POINT SOURCE EMISSIONS TO AIR

The installation will be the source of two point source emissions to air.

**Table 4-1 - Point Source Emissions to Air**

Emission Point and source	Substance/Parameter	Limit and unit	Reference period	Monitoring frequency	Standard
A1 (as per site plan) Mixing Tank Vent NZ 53655 24790	No limit set	n/a	n/a	n/a	n/a
A2 (as per site plan) Effluent Discharge Tank NZ 53654 24800	No limit set	n/a	n/a	n/a	n/a

### 4.2 POINT SOURCE EMISSIONS TO WATER

Not applicable

The facility will not be the source of any point source emissions to water.

### 4.3 POINT SOURCE EMISSIONS TO SEWER

The installation will be the source of one point source emission to sewer (an indirect discharge to water).

**Table 4-2 - Point Source Emissions to Sewer – emission limits and monitoring requirements**

Emission Point and source	Substance/Parameter	Limit and unit [5]	Reference period	Monitoring frequency [1] [2]	Standard
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S1 (as per site plan)  Treated water-based liquid waste to sewer  NZ 53656 24814	Hydrocarbon oil index (HOI) [4]	10 mg/l	n/a	Once per quarter	EN ISO 9377-2
	Free cyanide (CN-) [3] [4]	0.1 mg/l	n/a	Once every day	Various EN standards available (i.e. EN ISO 14403-1 and -2)
	Adsorbable organically bound halogens (AOX) [3] [4]	1 mg/l	n/a	Once per quarter	EN ISO 9562
	Arsenic (As) [3] [4]	0.1 mg/l	n/a	Once every day	Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2, EN ISO 15586)
	Cadmium (Cd) [3] [4]	0.1 mg/l (or 100 µg/l)	n/a	Once every day	
	Chromium (Cr) [3] [4]	0.3 mg/l	n/a	Once every day	Various EN standards available (i.e. EN ISO 10304-3, EN ISO 23913)
	Hexavalent chromium (expressed as Cr(VI)) [3] [4]	0.1 mg/l	n/a	Once every day	
	Copper (Cu) [3] [4]	0.5 mg/l	n/a	Once every day	Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2,
	Lead (Pb) [3] [4]	0.3 mg/l	n/a	Once every day	
	Nickel (Ni) [3] [4]	1.0 mg/l	n/a	Once every day	

					EN ISO 15586)
	Mercury (Hg) [3] [4]	10 µg/l	n/a	Once every day	Various EN standards available (i.e. EN ISO 17852, EN ISO 12846)
	Zinc (Zn) [3] [4]	2.0 mg/l (or 2,000 µg/l)	n/a	Once every day	Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2, EN ISO 15586)
	Benzene, toluene, ethylbenzene, xylene [3] [4]	No limit set	n/a	Once per quarter	EN ISO 15680
	Manganese (Mn) [3] [4]	No limit set	n/a	Once every day	Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2, EN ISO 15586)
	PFOS [3]	No limit set	n/a	Once every six months	No EN standard available
	PFOA [3]	No limit set	n/a	Once every six months	No EN standard available

[1] Monitoring frequencies may be reduced if the emission levels are proven to be sufficiently stable.

[2] In the case of batch discharges less frequent than the minimum monitoring frequency, monitoring is carried out once per batch.

[3] The monitoring/BAT-AELs only apply when the substance concerned is identified as relevant in the waste water inventory mentioned in BAT 3

[4] In the case of an indirect discharge to a receiving water body, the monitoring frequency may be reduced if the downstream waste water treatment plant abates the pollutants concerned

[5] The limits may not apply if the downstream waste water treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment.

## POINT SOURCE EMISSIONS TO GROUND

The installation will be the source of one point source emission to ground via an existing soakaway for domestic sewage from an existing septic tank that is not associated with waste treatment or waste storage. The source of this will be welfare facilities within the Site Offices and Site Laboratory and therefore no emissions monitoring is proposed for this effluent.

The emission is included since the soakaway is located outside of the perimeter boundary and there is a transfer outside of the installation boundary.

**Table 4-3 - Point Source Emissions to Ground – emission limits and monitoring requirements**

Emission Point and source	Substance/Parameter	Limit and unit	Reference period	Monitoring frequency	Standard
Existing septic tank discharge G1 (as per site plan) NZ 53738 24647	No limit set	n/a	n/a	n/a	n/a

Note: The discharge will comply with General Binding Rules: small sewage discharge to the ground for 2m<sup>3</sup> per day.

## EMISSIONS OF SUBSTANCES NOT CONTROLLED BY EMISSION LIMITS

Not applicable as the installation is not considered to be the source of significant emissions of fugitive substances.



## **ODOUR**

Not applicable as the installation is not considered to be the source of significant emissions of odour.

## 5 WASTE MANAGEMENT

The site will accept hazardous waste and non-hazardous wastes as described in Waste Pre-acceptance and waste acceptance, Section 3.2. Waste will be accepted, stored separately within the relevant storage location depending upon the classification of the waste and its hazardous properties; incompatible wastes will be stored separately to prevent incidents which could result in an uncontrollable reaction. Following storage over the required time period, waste will be removed from site for recovery and/or disposal (depending upon the classification of the waste).

The total throughput of the site will be a maximum of 600 tonnes per day and a maximum of 105,000 tonnes per annum.

Wastes will be stored on site for no longer than six months from the date of acceptance of the waste.

As described in Section 2.1, waste will be stored within different areas of the site depending upon the type of waste and its hazardous properties. There are five main waste storage locations at the site for storage of waste in containers with the following storage capacities:

- Main Warehouse (no flammable wastes) with a storage capacity of 816 pallet spaces (equivalent to 816 tonnes/m<sup>3</sup>).
- Flammable Yard Storage with a total storage capacity of 324 pallet spaces (324 tonnes/m<sup>3</sup>) consisting of 108 pallet spaces (equivalent to 108 tonnes/m<sup>3</sup> in covered storage and 216 pallet spaces (equivalent to 216 tonnes/m<sup>3</sup>) in uncovered storage.
- Small Warehouse storage with a storage capacity of 25 pallet spaces (equivalent to 25 tonnes/m<sup>3</sup>).
- Rear storage yard with a storage capacity of 400 pallet spaces (equivalent to 400 tonnes/m<sup>3</sup>).
- Bottom yard with a storage capacity of 400 pallet spaces (equivalent to 400 tonnes/m<sup>3</sup>).

Waste water can also be stored inside of two tanks which have a combined volume of 190 m<sup>3</sup>.

**Table 5-1 - List of Wastes Accepted for Oil/Water Separation**

Waste Code	Description of Waste
Maximum quantity of waste: 15,000 tonnes per year	
<b>05</b>	<b>Wastes from Petroleum Refining, Natural Gas Purification and Pyrolytic Treatment of Coal</b>
<b>05 01</b>	<b>wastes from petroleum refining</b>
05 01 05*	oil spills
<b>10</b>	<b>Wastes from Thermal Processes</b>
<b>10 02</b>	<b>wastes from industry</b>

10 02 11*	wastes from cooling-water treatment containing oil
<b>10 03</b>	<b>wastes from aluminium thermal metallurgy</b>
10 03 27*	wastes from cooling-water treatment containing oil
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 09*	wastes from cooling-water treatment containing oil
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
10 05 08*	wastes from cooling-water treatment containing oil
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 07*	wastes from cooling-water treatment containing oil
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
10 08 19*	wastes from cooling-water treatment containing oil
<b>12</b>	<b>Wastes from Shaping and Physical and Mechanical Surface Treatment of Metals and Plastics</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 19*	readily biodegradable machining oil
<b>13</b>	<b>Oil Wastes and Wastes of Liquid Fuels (except edible oils, and those in chapters 05, 12 and 19)</b>
<b>13 01</b>	<b>waste hydraulic oils</b>
13 01 04*	chlorinated emulsions
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral-based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils
13 01 13*	other hydraulic oils
<b>13 02</b>	<b>waste engine, gear and lubricating oils</b>

13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
<b>13 03</b>	<b>waste insulating and heat transmission oils</b>
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10*	other insulating and heat transmission oils
<b>13 04</b>	<b>bilge oils</b>
13 04 01*	bilge oils from inland navigation
13 04 02*	bilge oils from jetty sewers
13 04 03*	bilge oils from other navigation
<b>13 05</b>	<b>oil/water separator contents</b>
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
<b>13 07</b>	<b>wastes of liquid fuels</b>
13 07 01*	fuel oil and diesel
13 07 02*	petrol
13 07 03*	other fuels (including mixtures)
<b>13 08</b>	<b>oil wastes not otherwise specified</b>
13 08 01*	desalter sludges or emulsions
13 08 02*	other emulsions

13 08 99*	wastes not otherwise specified
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
<b>16 07</b>	<b>wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)</b>
16 07 08*	wastes containing oil
<b>19</b>	<b>Wastes from Waste Management Facilities, Off-site Waste Water Treatment Plants and the Preparation of Water Intended for Human Consumption and Water for Industrial Use</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 07*	oil and concentrates from separation
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 10*	grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
<b>20</b>	<b>Municipal Wastes (Household waste and similar commercial, industrial and institutional wastes) Including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 26*	oil and fat other than those mentioned in 20 01 25

**Table 5-2 - Types of Waste Accepted for Mixing for Consignment to Cemfuel Manufacture**

<b>Waste Code</b>	<b>Description of Waste</b>
Maximum quantity of waste: 50,000 tonnes per year	
<b>01</b>	<b>Wastes Resulting from Exploration, Mining, Quarrying and Physical and Chemical Treatment of Minerals</b>
<b>01 03</b>	<b>Waste from physical and chemical processing of metalliferous minerals</b>
01 03 07*	Other wastes containing dangerous substances from physical and chemical processing
<b>01 04</b>	<b>Wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 07*	Wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals
<b>02</b>	<b>Wastes from Agriculture, Horticulture, Aquaculture, Forestry, Hunting and Fishing, Food Preparation and Processing and Processing</b>
<b>02 04</b>	<b>Wastes from Sugar Processing</b>

02 04 02	Off-specification calcium carbonate
<b>02 06</b>	<b>Wastes from the baking and confectionary industry</b>
02 06 02	Wastes from preserving agents
<b>02 07</b>	<b>Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	Wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	Wastes from spirits distillation
02 07 03	Wastes from chemical treatment
<b>03</b>	<b>Wastes from Wood Processing and the Production of Panels and Furniture, Pulp, Paper and Cardboard</b>
<b>03 02</b>	<b>Wastes from wood preservation</b>
03 02 01*	non-halogenated organic wood preservatives
03 02 02*	organochlorinated wood preservatives
03 02 04	Inorganic wood preservatives
03 02 05	Other wood preservatives containing dangerous substances
<b>04</b>	<b>Wastes from the Leather, Fur and Textile Industries</b>
<b>04 01</b>	<b>Wastes from the leather and fur industry</b>
04 01 02	Liming waste
04 01 03*	Degreasing wastes containing solvents without a liquid phase
04 01 04	Tanning liquor containing chromium
04 01 05	Tanning liquor containing chromium
04 01 08	Waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	Wastes from dressing and finishing
<b>04 02</b>	<b>Wastes from the textile industry</b>
04 02 14*	wastes from finishing containing organic solvents
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 16*	dyestuffs and pigments containing dangerous substances
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16

<b>05</b>	<b>Wastes from Petroleum Refining, Natural Gas Purification and Pyrolytic Treatment of Coal</b>
<b>05 01</b>	<b>wastes from petroleum refining</b>
05 01 05*	Oil Spills
05 01 11*	wastes from cleaning of fuels with bases
05 01 12*	oil containing acids
05 01 13	Boiler feed water sludges
05 01 14	Wastes from cooling columns
05 01 16	sulphur-containing wastes from petroleum desulphurisation
<b>05 06</b>	<b>Wastes from the pyrolytic treatment of coal</b>
05 06 04	Waste from cooling columns
<b>06</b>	<b>Wastes from Inorganic Chemical Processes</b>
<b>06 01</b>	<b>Wastes from the manufacture, formulation, supply and use (MFSU) of acids</b>
06 01 01*	Sulphuric acid and sulphurous acid
06 01 02*	Hydrochloric acid
06 01 03*	Hydrofluoric acid
06 01 04*	Phosphoric and phosphorous acid
06 01 05*	Nitric acid and nitrous acid
06 01 06*	Other acids
<b>06 02</b>	<b>Wastes from the MFSU of bases</b>
06 02 01*	Calcium hydroxide
06 02 03*	Ammonium hydroxide
06 02 04*	Sodium and potassium hydroxide
06 02 05*	Other bases
<b>06 03</b>	<b>wastes from the MFSU of salts and their solutions and metallic oxides</b>
06 03 11*	solid salts and solutions containing cyanides
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
06 03 15*	metallic oxides containing heavy metals

06 03 16	metallic oxides other than those mentioned in 06 03 15
<b>06 04</b>	<b>metal-containing wastes other than those mentioned in 06 03</b>
06 04 04*	Wastes containing mercury
06 04 05*	Wastes containing other heavy metals
<b>06 06</b>	<b>wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes</b>
06 06 02*	wastes containing dangerous sulphides
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
<b>06 07</b>	<b>wastes from the MFSU of halogens and halogen chemical processes</b>
06 07 04*	solutions and acids, for example contact acid
<b>06 08</b>	<b>wastes from the MFSU of silicon and silicon derivatives</b>
06 08 02*	wastes containing dangerous silicones
06 08 99	wastes not otherwise specified
<b>06 09</b>	<b>wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes</b>
06 09 03*	calcium-based reaction wastes containing or contaminated with dangerous substances
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
<b>06 10</b>	<b>wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture</b>
06 10 02*	wastes containing dangerous substances
<b>06 11</b>	<b>wastes from the manufacture of inorganic pigments and opacifiers</b>
06 11 01	calcium-based reaction wastes from titanium dioxide production
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides.
<b>07</b>	<b>Wastes from Organic Chemical Processes</b>
<b>07 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors

07 01 07*	halogenated still bottoms and reaction residues
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 01*	aqueous washing liquids and mother liquors
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 07*	halogenated still bottoms and reaction residues
07 02 14*	wastes from additives containing dangerous substances
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 16*	wastes containing dangerous silicones
07 02 17	wastes containing silicones other than those mentioned in 07 02 16
<b>07 03</b>	<b>wastes from the MFSU of organic dyes and pigments (except 06 11)</b>
07 03 01*	aqueous washing liquids and mother liquors
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 07*	halogenated still bottoms and reaction residues
<b>07 04</b>	<b>wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides</b>
07 04 01*	aqueous washing liquids and mother liquors
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals</b>
07 05 01*	aqueous washing liquids and mother liquors
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
<b>07 06</b>	<b>wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics</b>
07 06 01*	aqueous washing liquids and mother liquors
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors

<b>07 07</b>	<b>wastes from the MFSU of fine chemicals and chemical products not otherwise specified</b>
07 07 01*	aqueous washing liquids and mother liquors
07 07 03*	organic halogenated solvents, washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
<b>08</b>	<b>Wastes from Manufacture, Formulation, Supply and Use (MFSU) of Coatings (Paints, Varnishes and Vitreous Enamels), Adhesives, Sealants and Printing Inks</b>
<b>08 01</b>	<b>wastes from MFSU and removal of paint and varnish</b>
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 17*	wastes from paint or varnish removal containing organic solvents or other dangerous substances
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 19	aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 01 21*	waste paint or varnish remover
<b>08 03</b>	<b>wastes from MFSU of printing inks</b>
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 12*	waste ink containing dangerous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 16*	waste etching solutions
08 03 17*	waste printing toner containing dangerous substances
08 03 18	waste printing toner other than those mentioned in 08 03 17
<b>08 04</b>	<b>wastes from MFSU of adhesives and sealants (including waterproofing products)</b>
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09

08 04 11*	adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11
08 04 13*	aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous substances
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other dangerous substances
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
<b>08 05</b>	<b>wastes not otherwise specified in 08</b>
08 05 01*	waste isocyanates
<b>09</b>	<b>Wastes from the Photographic Industry</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixer solutions
09 01 05*	bleach solutions and bleach fixer solutions
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06 A
<b>10</b>	<b>Wastes from Thermal Processes</b>
<b>10 01</b>	<b>wastes from power stations and other combustion plants (except 19)</b>
10 01 09*	Sulphuric acid
10 01 18*	wastes from gas cleaning containing dangerous substances
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
<b>10 02</b>	<b>Wastes from the iron and steel industry</b>

10 02 11*	wastes from cooling-water treatment containing oil
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
<b>10 03</b>	<b>Wastes from aluminium thermal metallurgy</b>
10 03 27*	wastes from cooling-water treatment containing oil
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 29	wastes from treatment of salt slags and black drosses containing dangerous substances
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 09*	wastes from cooling-water treatment containing oil
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
10 05 08*	wastes from cooling-water treatment containing oil
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
<b>10 06</b>	<b>Wastes from copper thermal metallurgy</b>
10 06 09*	Wastes from cooling-water treatment containing oil
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 07*	wastes from cooling-water treatment containing oil
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
10 08 19*	wastes from cooling-water treatment containing oil
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
<b>10 09</b>	<b>Wastes from casting of ferrous pieces</b>
10 09 13*	waste binders containing dangerous substances
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 15*	waste crack-indicating agent containing dangerous substances
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15

<b>10 10</b>	<b>wastes from casting of non-ferrous pieces</b>
10 10 13*	waste binders containing dangerous substances
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 15*	waste crack-indicating agent containing dangerous substances
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
<b>10 12</b>	<b>Wastes from manufacture of glass and glass products</b>
10 12 11*	wastes from glazing containing heavy metals
10 12 12	wastes from glazing other than those mentioned in 10 12 11
<b>11</b>	<b>Wastes from Chemical Surface Treatment and Coating of Metals and other Materials; Non-Ferrous Hydro-Metallurgy</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)</b>
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 08*	phosphatising sludges
11 01 11*	phosphatising sludges
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 13*	degreasing wastes containing dangerous substances
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 01 16*	saturated or spent ion exchange resins
11 01 98*	other wastes containing dangerous substances
<b>11 02</b>	<b>wastes from non-ferrous hydrometallurgical processes</b>
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 05*	wastes from copper hydrometallurgical processes containing dangerous substances
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 02 07*	other wastes containing dangerous substances

<b>12</b>	<b>Wastes from Shaping and Physical and Mechanical Surface Treatment of Metals and Plastics</b>
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)
12 01 08*	machining emulsions and solutions containing halogens
12 01 09*	machining emulsions and solutions free of halogens
12 01 10*	synthetic machining oils
12 01 19*	readily biodegradable machining oil
<b>12 03</b>	<b>wastes from water and steam degreasing processes (except 11)</b>
12 03 01*	aqueous washing liquids
12 03 02*	steam degreasing wastes
<b>13</b>	<b>Oil Wastes and Wastes of Liquid Fuels (except edible oils, and those in chapters 05, 12 and 19)</b>
<b>13 01</b>	<b>waste hydraulic oils</b>
13 01 04*	chlorinated emulsions
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral-based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils
13 01 13*	other hydraulic oils
<b>13 02</b>	<b>waste engine, gear and lubricating oils</b>
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
<b>13 03</b>	<b>waste insulating and heat transmission oils</b>

13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10*	other insulating and heat transmission oils
<b>13 04</b>	<b>Bilge oils</b>
13 04 01*	bilge oils from inland navigation
13 04 02*	bilge oils from jetty sewers
13 04 03*	bilge oils from other navigation
<b>13 05</b>	<b>Oil/water separator contents</b>
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
<b>13 07</b>	<b>Wastes of liquid fuels</b>
13 07 01*	fuel oil and diesel
13 07 02*	petrol
13 07 03*	other fuels (including mixtures)
<b>13 08</b>	<b>oil wastes not otherwise specified</b>
13 08 02*	other emulsions
<b>14</b>	<b>Waste Organic Solvents, Refrigerants and Propellants (except 07 and 08)</b>
<b>14 06</b>	<b>waste organic solvents, refrigerants and foam/aerosol propellants</b>
14 06 01*	chlorofluorocarbons, HCFC, HFC
14 06 02*	other halogenated solvents and solvent mixtures
14 06 03*	other solvents and solvent mixtures
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 13*	Brake fluids

16 01 14*	antifreeze fluids containing dangerous substances
16 01 15	antifreeze fluids other than those mentioned in 16 01 14
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 15*	hazardous components removed from discarded equipment
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 03*	inorganic wastes containing dangerous substances
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 05*	organic wastes containing dangerous substances
16 03 06	organic wastes other than those mentioned in 16 03 05
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 06*	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
16 05 07*	discarded inorganic chemicals consisting of or containing dangerous substances
16 05 08*	discarded organic chemicals consisting of or containing dangerous substances
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
<b>16 07</b>	<b>wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)</b>
16 07 08*	wastes containing oil
16 07 09*	wastes containing other dangerous substances
<b>16 08</b>	<b>Spent catalysts</b>
16 08 04	spent fluid catalytic cracking catalysts (except 16 08 07)
16 08 05*	spent catalysts containing phosphoric acid
16 08 06*	spent liquids used as catalysts
16 08 07*	spent catalysts contaminated with dangerous substances
<b>16 10</b>	<b>aqueous liquid wastes destined for off-site treatment</b>
16 10 01*	aqueous liquid wastes containing dangerous substances
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03*	aqueous concentrates containing dangerous substances
16 10 04	aqueous concentrates other than those mentioned in 16 10 03

<b>18</b>	<b>Wastes from Human and Animal Health Care and/or Related Research (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 06*	chemicals consisting of or containing dangerous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 09	medicines other than those mentioned in 18 01 08
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 05*	chemicals consisting of or containing dangerous substances
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 08	medicines other than those mentioned in 18 02 07
<b>19</b>	<b>Wastes from Waste Management Facilities, Off-site Waste Water Treatment Plants and the Preparation of Water Intended for Human Consumption and Water for Industrial Use</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing dangerous substances
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11*	other wastes containing dangerous substances
<b>19 04</b>	<b>vitrified waste and wastes from vitrification</b>
19 04 04	aqueous liquid wastes from vitrified waste tempering
<b>19 07</b>	<b>landfill leachate</b>
19 07 02	landfill leachate containing dangerous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
<b>19 09</b>	<b>wastes from the preparation of water intended for human consumption or water for industrial use</b>
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers

<b>19 11</b>	<b>Wastes from oil regeneration</b>
19 11 03*	aqueous liquid wastes
19 11 04*	wastes from cleaning of fuel with bases
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 10	combustible waste (refuse derived fuel)
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous substances
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07
<b>20</b>	<b>Municipal Wastes (Household waste and similar commercial, industrial and institutional wastes) Including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 13*	solvents
20 01 14*	Acids
20 01 15*	Alkalines
20 01 17*	Photochemicals
20 01 19*	Pesticides
20 01 25	Edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 31	cytotoxic and cytostatic medicines
20 01 32	medicines other than those mentioned in 20 01 31

**Table 5-3 – Waste Types for Acceptance for Transfer including physical bulking**

Waste Code	Description of Waste
Maximum quantity of waste: 90,000 tonnes per year	
<b>01</b>	<b>Wastes Resulting from Exploration, Mining, Quarrying and Physical and Chemical Treatment of Minerals</b>
<b>01 01</b>	<b>wastes from mineral excavation</b>
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
<b>01 03</b>	<b>Waste from physical and chemical processing of metalliferous minerals</b>
01 03 04*	acid-generating tailings from processing of sulphide ore
01 03 05*	other tailings containing dangerous substances
01 03 06*	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 07*	other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals
<b>01 04</b>	<b>Wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 07*	Wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
<b>02</b>	<b>Wastes from Agriculture, Horticulture, Aquaculture, Forestry, Hunting and Fishing, Food Preparation and Processing and Processing</b>

<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
02 01 08*	agrochemical waste containing dangerous substances
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	Waste metal
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 03	materials unsuitable for consumption or processing
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
<b>02 04</b>	<b>Wastes from Sugar Processing</b>
02 04 01	soil from cleaning and washing beet
02 04 02	Off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
<b>02 05</b>	<b>sludges from on-site effluent treatment</b>
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
<b>02 06</b>	<b>Wastes from the baking and confectionary industry</b>
02 06 01	materials unsuitable for consumption or processing

02 06 02	Wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
<b>02 07</b>	<b>Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	Wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	Wastes from spirits distillation
02 07 03	Wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
<b>03</b>	<b>Wastes from Wood Processing and the Production of Panels and Furniture, Pulp, Paper and Cardboard</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 01*	waste bark and cork
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>03 02</b>	<b>wastes from wood preservation</b>
03 02 01*	non-halogenated organic wood preservatives
03 02 02*	organochlorinated wood preservatives
03 02 03*	organometallic wood preservatives A
03 02 04*	inorganic wood preservatives
03 02 05*	other wood preservatives containing dangerous substances
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
03 03 01	Waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10

<b>04</b>	<b>wastes from the leather and fur industry</b>
<b>04 01</b>	<b>Leather and fur industry</b>
04 01 01	fleshings and lime split wastes
04 01 02	liming waste
04 01 03*	degreasing wastes containing solvents without a liquid phase
04 01 04	tanning liquor containing chromium
04 01 05	tanning liquor free of chromium
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 14*	wastes from finishing containing organic solvents
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 16*	dyestuffs and pigments containing dangerous substances
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
<b>05</b>	<b>Wastes from Petroleum Refining, Natural Gas Purification and Pyrolytic Treatment of Coal</b>
<b>05 01</b>	<b>wastes from petroleum refining</b>
05 01 05*	Oil spills
05 01 07*	Acid tars
05 01 08*	Other tars
05 01 11*	wastes from cleaning of fuels with bases

05 01 12*	oil containing acids
05 01 14	wastes from cooling columns
05 01 16	sulphur-containing wastes from petroleum desulphurisation
05 01 17	Bitumen
<b>05 06</b>	<b>wastes from the pyrolytic treatment of coal</b>
05 06 01*	acid tars
05 06 03*	other tars
05 06 04	waste from cooling columns
<b>05 07</b>	<b>wastes from natural gas purification and transportation</b>
05 07 01*	wastes containing mercury
05 07 02	wastes containing sulphur
<b>06</b>	<b>Inorganic Chemical Processes</b>
<b>06 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of acids</b>
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 01 03*	hydrofluoric acid
06 01 04*	phosphoric and phosphorous acid
06 01 05*	nitric acid and nitrous acid
06 01 06*	other acids
<b>06 02</b>	<b>wastes from the MFSU of bases</b>
06 02 01*	calcium hydroxide
06 02 03*	ammonium hydroxide
06 02 04*	sodium and potassium hydroxide
06 02 05*	Other bases
<b>06 03</b>	<b>wastes from the MFSU of salts and their solutions and metallic oxides</b>

06 03 11*	solid salts and solutions containing cyanides
06 03 13*	solid salts and solutions containing heavy metals
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
06 03 15*	metallic oxides containing heavy metals
06 03 16	metallic oxides other than those mentioned in 06 03 15
<b>06 04</b>	<b>metal-containing wastes other than those mentioned in 06 03</b>
06 04 03*	wastes containing arsenic
06 04 04*	wastes containing mercury
06 04 05*	wastes containing other heavy metals
<b>06 06</b>	<b>wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes</b>
06 06 02*	wastes containing dangerous sulphides
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
<b>06 07</b>	<b>wastes from the MFSU of halogens and halogen chemical processes</b>
06 07 02*	activated carbon from chlorine production
06 07 03*	barium sulphate sludge containing mercury
06 07 04*	solutions and acids, for example contact acid
<b>06 08</b>	<b>wastes from the MFSU of silicon and silicon derivatives</b>
06 08 02*	wastes containing dangerous silicones
06 08 99	wastes not otherwise specified
<b>06 09</b>	<b>wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes</b>
06 09 02	phosphorous slag
06 09 03*	calcium-based reaction wastes containing or contaminated with dangerous substances
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03

<b>06 10</b>	<b>wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and</b>
06 10 02*	wastes containing dangerous substances
<b>06 11</b>	<b>wastes from the manufacture of inorganic pigments and opacifiers</b>
06 11 01	calcium-based reaction wastes from titanium dioxide production
<b>06 13</b>	<b>wastes from inorganic chemical processes not otherwise specified</b>
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides.
06 13 02*	spent activated carbon (except 06 07 02)
06 13 03	carbon black
06 13 05*	Soot
<b>07</b>	<b>Wastes from Organic Chemical Processes</b>
<b>07 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 07*	halogenated still bottoms and reaction residues
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 01*	aqueous washing liquids and mother liquors
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 07*	halogenated still bottoms and reaction residues
07 02 13	waste plastic
07 02 14*	wastes from additives containing dangerous substances
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 16*	wastes containing dangerous silicones

07 02 17	wastes containing silicones other than those mentioned in 07 02 16
<b>07 03</b>	<b>wastes from the MFSU of organic dyes and pigments (except 06 11)</b>
07 03 01*	aqueous washing liquids and mother liquors
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 07*	halogenated still bottoms and reaction residues
<b>07 04</b>	<b>wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides</b>
07 04 01*	aqueous washing liquids and mother liquors
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
07 04 13*	solid wastes containing dangerous substances
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals</b>
07 05 01*	aqueous washing liquids and mother liquors
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 13*	solid wastes containing dangerous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
<b>07 06</b>	<b>wastes from the MFSU of fats, grease, soaps, detergents, disinfectants</b>
07 06 01*	aqueous washing liquids and mother liquors and cosmetics
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
<b>07 07</b>	<b>wastes from the MFSU of fine chemicals and chemical products not otherwise specified</b>
07 07 01*	aqueous washing liquids and mother liquors
07 07 03*	organic halogenated solvents, washing liquids and mother liquors

07 07 04*	other organic solvents, washing liquids and mother liquors
<b>08</b>	<b>Wastes from Manufacture, Formulation, Supply and Use (MFSU) of Coatings (Paints, Varnishes and Vitreous Enamels), Adhesives, Sealants and Printing Inks</b>
<b>08 01</b>	<b>wastes from MFSU and removal of paint and varnish</b>
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 17*	wastes from paint or varnish removal containing organic solvents or other dangerous substances
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 01 21*	waste paint or varnish remover
<b>08 02</b>	<b>wastes from MFSU of other coatings (including ceramic materials)</b>
08 02 01	waste coating powders
08 02 03	aqueous suspensions containing ceramic materials
<b>08 03</b>	<b>wastes from MFSU of printing inks</b>
08 03 08	aqueous liquid waste containing ink
08 03 12*	waste ink containing dangerous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 16*	waste etching solutions
08 03 17*	waste printing toner containing dangerous substances

08 03 18	waste printing toner other than those mentioned in 08 03 17
08 03 19*	disperse oil
<b>08 04</b>	<b>wastes from MFSU of adhesives and sealants (including waterproofing products)</b>
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 11*	adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other dangerous substances
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
08 04 17*	rosin oil
<b>08 05</b>	<b>wastes not otherwise specified in 08</b>
08 05 01*	waste isocyanates
<b>09</b>	<b>Wastes from the Photographic Industry</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixer solutions
09 01 05*	bleach solutions and bleach fixer solutions
09 01 06*	wastes containing silver from on-site treatment of photographic wastes
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06 A
<b>10</b>	<b>Wastes from Thermal Processes</b>

<b>10 01</b>	<b>wastes from power stations and other combustion plants (except 19)</b>
10 01 09*	sulphuric acid
10 01 18*	wastes from gas cleaning containing dangerous substances
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
<b>10 02</b>	<b>wastes from the iron and steel industry</b>
10 02 01	wastes from the processing of slag
10 02 11*	wastes from cooling-water treatment containing oil
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
<b>10 03</b>	<b>wastes from aluminium thermal metallurgy</b>
10 03 02	anode scraps
10 03 17*	tar-containing wastes from anode manufacture
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 27*	wastes from cooling-water treatment containing oil
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 29*	wastes from treatment of salt slags and black drosses containing dangerous substances
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 03*	calcium arsenate
10 04 09*	wastes from cooling-water treatment containing oil
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>

10 05 08*	wastes from cooling-water treatment containing oil
10 06 09*	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
<b>10 06</b>	<b>wastes from copper thermal metallurgy</b>
10 06 09*	wastes from cooling-water treatment containing oil
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 07*	wastes from cooling-water treatment containing oil
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
10 08 12*	tar-containing wastes from anode manufacture
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 19*	wastes from cooling-water treatment containing oil
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
<b>10 09</b>	<b>wastes from casting of ferrous pieces</b>
10 09 13*	waste binders containing dangerous substances
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 15*	waste crack-indicating agent containing dangerous substances
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
<b>10 10</b>	<b>wastes from casting of non-ferrous pieces</b>
10 10 13*	waste binders containing dangerous substances
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 15*	waste crack-indicating agent containing dangerous substances
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15

<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>
10 11 09*	waste preparation mixture before thermal processing, containing dangerous substances
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
<b>10 12</b>	<b>wastes from manufacture of ceramic goods, bricks, tiles and construction products</b>
10 12 01	waste preparation mixture before thermal processing
10 12 11*	wastes from glazing containing heavy metals
10 12 12	wastes from glazing other than those mentioned in 10 12 11
<b>10 13</b>	<b>wastes from manufacture of cement, lime and plaster and articles and products made from them</b>
10 13 01	waste preparation mixture before thermal processing
<b>11</b>	<b>Wastes from Chemical Surface Treatment and Coating of Metals and other Materials; Non-Ferrous Hydro-Metallurgy</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)</b>
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 08*	phosphatising sludges
11 01 11*	aqueous rinsing liquids containing hazardous substances
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 13*	degreasing wastes containing dangerous substances
11 01 14	degreasing wastes other than those mentioned in 11 01 13

11 01 16*	saturated or spent ion exchange resins
11 01 98*	other wastes containing dangerous substances
<b>11 02</b>	<b>wastes from non-ferrous hydrometallurgical processes</b>
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 05*	wastes from copper hydrometallurgical processes containing dangerous substances
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 02 07*	other wastes containing dangerous substances
<b>11 03</b>	<b>sludges and solids from tempering processes</b>
11 03 02*	other wastes
<b>11 05</b>	<b>wastes from hot galvanising processes</b>
11 05 01	Hard Zinc
11 05 02	Zinc ash
11 05 04*	Spent flux
<b>12</b>	<b>Wastes from Shaping and Physical and Mechanical Surface Treatment of Metals and Plastics</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 05	plastics shavings and turnings
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)
12 01 08*	machining emulsions and solutions containing halogens
12 01 09*	machining emulsions and solutions free of halogens
12 01 10*	synthetic machining oils
12 01 13	welding wastes
12 01 19*	readily biodegradable machining oil

<b>12 03</b>	<b>wastes from water and steam degreasing processes (except 11)</b>
12 03 01*	aqueous washing liquids
12 03 02*	steam degreasing wastes
<b>13</b>	<b>Oil Wastes and Wastes of Liquid Fuels (except edible oils, and those in chapters 05, 12 and 19)</b>
<b>13 01</b>	<b>waste hydraulic oils</b>
13 01 04*	chlorinated emulsions
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral-based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils
13 01 13*	other hydraulic oils
<b>13 02</b>	<b>waste engine, gear and lubricating oils</b>
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
<b>13 03</b>	<b>waste insulating and heat transmission oils</b>
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10	other insulating and heat transmission oils

<b>13 04</b>	<b>bilge oils</b>
13 04 01*	bilge oils from inland navigation
13 04 02*	bilge oils from jetty sewers
13 04 03*	bilge oils from other navigation
<b>13 05</b>	<b>oil/water separator contents</b>
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
<b>13 07</b>	<b>wastes of liquid fuels</b>
13 07 01*	fuel oil and diesel
13 07 02*	Petrol
13 07 03*	Other fuels (including mixtures)
<b>13 08</b>	<b>oil wastes not otherwise specified</b>
13 08 02*	other emulsions
<b>14</b>	<b>Waste Organic Solvents, Refrigerants and Propellants (except 07 and 08)</b>
<b>14 06</b>	<b>waste organic solvents, refrigerants and foam/aerosol propellants</b>
14 06 01*	chlorofluorocarbons, HCFC, HFC
14 06 02*	other halogenated solvents and solvent mixtures
14 06 03*	other solvents and solvent mixtures
<b>15</b>	<b>Waste Packaging; Absorbents, Wiping Cloths, Filter Materials and Protective Clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging

15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
15 01 10*	packaging containing residues of or contaminated by dangerous substances
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 03	end-of-life tyres
16 01 07*	Oil filters
16 01 08*	components containing mercury
16 01 09*	components containing PCBs
16 01 13*	brake fluids
16 01 14*	antifreeze fluids containing dangerous substances
16 01 15	antifreeze fluids containing dangerous substances
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	plastic
16 01 20	glass
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14

16 01 22	components not otherwise specified
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15*	hazardous components removed from discarded equipment
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 03*	inorganic wastes containing dangerous substances
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 05*	organic wastes containing dangerous substances
16 03 06*	organic wastes other than those mentioned in 16 03 05
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 04*	gases in pressure containers (including halons) containing dangerous substances
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
16 05 06*	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
16 05 07*	discarded inorganic chemicals consisting of or containing dangerous substances
16 05 08*	discarded organic chemicals consisting of or containing dangerous substances
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
<b>16 06</b>	<b>batteries and accumulators</b>
16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries

16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
<b>16 07</b>	<b>wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)</b>
16 07 08*	wastes containing oil
16 07 09*	wastes containing other dangerous substances
<b>16 08</b>	<b>wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)</b>
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 02*	spent catalysts containing dangerous transition metals <sup>3</sup> or dangerous transition metal compounds, <sup>3</sup> For the purpose of this entry, transition metals are: scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum. These metals or their compounds are dangerous if they are classified as dangerous substances. The classification of dangerous substances shall determine which among those transition metals and which transition metal compounds are hazardous.
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 08 04	spent fluid catalytic cracking catalysts (except 16 08 07)
16 08 05*	spent catalysts containing phosphoric acid
16 08 06*	spent catalysts containing phosphoric acid
16 08 07*	spent catalysts contaminated with dangerous substances
<b>16 09</b>	<b>oxidising substances</b>
16 09 01*	permanganates, for example potassium permanganate
16 09 02*	chromates, for example potassium chromate, potassium or sodium dichromate
16 09 03*	peroxides, for example hydrogen peroxide
16 09 04*	oxidising substances, not otherwise specified
<b>16 10</b>	<b>aqueous liquid wastes destined for off-site treatment</b>
16 10 01	aqueous liquid wastes containing dangerous substances

16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03*	aqueous concentrates containing dangerous substances
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
<b>17</b>	<b>Construction and Demolition Wastes (including excavated soil from contaminated sites)</b>
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
17 02 04*	glass, plastic and wood containing or contaminated with dangerous substances
<b>17 04</b>	<b>Copper, bronze, brass</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	Iron and steel
17 04 06	Tin
17 04 07	Mixed metals
17 04 11	cables other than those mentioned in 17 04 10
<b>18</b>	<b>Wastes from Human and Animal Health Care and/or Related Research (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 06*	chemicals consisting of or containing dangerous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 09	medicines other than those mentioned in 18 01 08
18 01 10*	amalgam waste from dental care

<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 05*	chemicals consisting of or containing dangerous substances
18 02 06	chemicals other than those mentioned in 18 02 05
<b>19</b>	<b>Wastes from Waste Management Facilities, Off-site Waste Water Treatment Plants and the Preparation of Water Intended for Human Consumption and Water for Industrial Use</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing dangerous substances
19 02 09*	solid combustible wastes containing dangerous substances
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11	other wastes containing dangerous substances
<b>19 03</b>	<b>stabilised/solidified wastes</b>
19 03 04*	wastes marked as hazardous, partly stabilised
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 06*	wastes marked as hazardous, solidified
19 03 07	solidified wastes other than those mentioned in 19 03 06
<b>19 04</b>	<b>vitrified waste and wastes from vitrification</b>
19 04 01	vitrified waste
19 04 02*	fly ash and other flue-gas treatment wastes
19 04 03*	non-vitrified solid phase

19 04 04	aqueous liquid wastes from vitrified waste tempering
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
<b>19 07</b>	<b>landfill leachate</b>
19 07 02*	landfill leachate containing dangerous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 01	Screenings
19 08 02	waste from desanding
19 08 06*	saturated or spent ion exchange resins
19 08 07*	solutions and sludges from regeneration of ion exchangers
19 08 08*	membrane system waste containing heavy metals
<b>19 09</b>	<b>wastes from the preparation of water intended for human consumption or water for industrial use</b>
19 09 01	solid waste from primary filtration and screenings
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>

19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 05*	other fractions containing dangerous substances
19 10 06	other fractions other than those mentioned in 19 10 05
<b>19 11</b>	<b>wastes from oil regeneration</b>
19 11 02*	acid tars
19 11 03*	aqueous liquid wastes
19 11 04*	wastes from cleaning of fuel with bases
19 11 07*	wastes from flue-gas cleaning
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	Glass
19 12 06*	wood containing dangerous substances
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous substances

19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07
<b>20</b>	<b>Municipal Wastes (Household waste and similar commercial, industrial and institutional wastes) Including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	Glass
20 01 10	clothes
20 01 11	Textiles
20 01 13*	solvents
20 01 14*	Acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 32	medicines other than those mentioned in 20 01 31
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing discarded electrical and electronic equipment

	other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 37*	wood containing dangerous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	Metals
20 01 41	wastes from chimney sweeping
<b>20 03</b>	<b>other municipal wastes</b>
20 03 02	waste from markets
20 03 07	Bulky waste

**Table 5-4 – Waste Types for Acceptance for Waste Transfer (in containers only)**

Waste Code	Description of Waste
Maximum quantity of waste: 90,000 tonnes per year	
<b>01</b>	<b>Wastes Resulting from Exploration, Mining, Quarrying and Physical and Chemical Treatment of Minerals</b>
<b>01 01</b>	<b>wastes from mineral excavation</b>
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
<b>01 03</b>	<b>Waste from physical and chemical processing of metalliferous minerals</b>
01 03 04*	acid-generating tailings from processing of sulphide ore
01 03 05*	other tailings containing dangerous substances
01 03 06*	tailings other than those mentioned in 01 03 04 and 01 03 05

01 03 07*	other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
<b>01 04</b>	<b>Wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 07*	Wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 10	dusty and powdery wastes other than those mentioned in 01 04 07
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
<b>01 05</b>	<b>drilling muds and other drilling wastes</b>
01 05 04	freshwater drilling muds and wastes
01 05 05*	oil-containing drilling muds and wastes
01 05 06*	drilling muds and other drilling wastes containing dangerous substances
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
<b>02</b>	<b>Wastes from Agriculture, Horticulture, Aquaculture, Forestry, Hunting and Fishing, Food Preparation and Processing and Processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 01	sludges from washing and cleaning
02 01 02	animal-tissue waste

02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 01 08*	agrochemical waste containing dangerous substances
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	Waste metal
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
<b>02 04</b>	<b>Wastes from Sugar Processing</b>
02 04 01	soil from cleaning and washing beet
02 04 02	Off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
<b>02 05</b>	<b>sludges from on-site effluent treatment</b>
02 05 01	materials unsuitable for consumption or processing

02 05 02	sludges from on-site effluent treatment
<b>02 06</b>	<b>Wastes from the baking and confectionary industry</b>
02 06 01	materials unsuitable for consumption or processing
02 06 02	Wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
<b>02 07</b>	<b>Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	Wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	Wastes from spirits distillation
02 07 03	Wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
<b>03</b>	<b>Wastes from Wood Processing and the Production of Panels and Furniture, Pulp, Paper and Cardboard</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 02 01*	waste bark and cork
03 02 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>03 02</b>	<b>wastes from wood preservation</b>
03 02 01*	non-halogenated organic wood preservatives
03 02 02*	organochlorinated wood preservatives
03 02 03*	organometallic wood preservatives A
03 02 04*	inorganic wood preservatives
03 02 05*	other wood preservatives containing dangerous substances
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>

03 03 01	Waste bark and wood
03 03 02	green liquor sludge (from recovery of cooking liquor)
03 03 05	de-inking sludges from paper recycling
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 09	lime mud waste
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
<b>04</b>	<b>wastes from the leather and fur industry</b>
<b>04 01</b>	<b>Wastes from the leather and fur industry</b>
04 01 01	fleshings and lime split wastes
04 01 02	liming waste
04 01 03*	degreasing wastes containing solvents without a liquid phase
04 01 04	tanning liquor containing chromium
04 01 05	tanning liquor free of chromium
04 01 06	sludges, in particular from on-site effluent treatment containing chromium
04 01 07	sludges, in particular from on-site effluent treatment free of chromium
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 14*	wastes from finishing containing organic solvents
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 16*	dyestuffs and pigments containing dangerous substances

04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 19*	sludges from on-site effluent treatment containing dangerous substances
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
<b>05</b>	<b>Wastes from Petroleum Refining, Natural Gas Purification and Pyrolytic Treatment of Coal</b>
<b>05 01</b>	<b>wastes from petroleum refining</b>
05 01 02*	desalter sludges
05 01 03*	tank bottom sludges
05 01 04*	acid alkyl sludges
05 01 05*	Oil spills
05 01 06*	oily sludges from maintenance operations of the plant or equipment
05 01 07*	Acid tars
05 01 08*	Other tars
05 01 09*	sludges from on-site effluent treatment containing dangerous substances
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
05 01 11*	wastes from cleaning of fuels with bases
05 01 12*	oil containing acids
05 01 13	boiler feedwater sludges
05 01 14	wastes from cooling columns
05 01 15*	spent filter clays
05 01 16	sulphur-containing wastes from petroleum desulphurisation
05 01 17	Bitumen
<b>05 06</b>	<b>wastes from the pyrolytic treatment of coal</b>
05 06 01*	Acid tars

05 06 03*	Other tars
05 06 04	Waste from cooling columns
<b>05 07</b>	<b>wastes from natural gas purification and transportation</b>
05 07 01*	wastes containing mercury
05 07 02	wastes containing sulphur
<b>06</b>	<b>Inorganic Chemical Processes</b>
<b>06 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of acids</b>
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 01 03*	hydrofluoric acid
06 01 04*	phosphoric and phosphorous acid
06 01 05*	nitric acid and nitrous acid
06 01 06*	other acids
<b>06 02</b>	<b>wastes from the MFSU of bases</b>
06 02 01*	calcium hydroxide
06 02 03*	ammonium hydroxide
06 02 04*	sodium and potassium hydroxide
06 02 05*	Other bases
<b>06 03</b>	<b>wastes from the MFSU of salts and their solutions and metallic oxides</b>
06 03 11*	solid salts and solutions containing cyanides
06 03 13*	solid salts and solutions containing heavy metals
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
06 03 15*	metallic oxides containing heavy metals
06 03 16	metallic oxides other than those mentioned in 06 03 15
<b>06 04</b>	<b>metal-containing wastes other than those mentioned in 06 03</b>

06 04 03*	wastes containing arsenic
06 04 04*	wastes containing mercury
06 04 05*	wastes containing other heavy metals
<b>06 05</b>	<b>sludges from on-site effluent treatment</b>
06 05 02*	sludges from on-site effluent treatment containing dangerous substances
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
<b>06 06</b>	<b>wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes</b>
06 06 02*	wastes containing dangerous sulphides
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
<b>06 07</b>	<b>wastes from the MFSU of halogens and halogen chemical processes</b>
06 07 01*	wastes containing asbestos from electrolysis
06 07 02*	activated carbon from chlorine production
06 07 03*	barium sulphate sludge containing mercury
06 07 04*	solutions and acids, for example contact acid
<b>06 08</b>	<b>wastes from the MFSU of silicon and silicon derivatives</b>
06 08 02*	wastes containing dangerous silicones
06 08 99	wastes not otherwise specified
<b>06 09</b>	<b>wastes from the MFSU of phosphorous chemicals and phosphorous chemical processes</b>
06 09 02	phosphorous slag
06 09 03*	calcium-based reaction wastes containing or contaminated with dangerous substances
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
<b>06 10</b>	<b>wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and</b>
06 10 02*	wastes containing dangerous substances
<b>06 11</b>	<b>wastes from the manufacture of inorganic pigments and opacifiers</b>

06 11 01	calcium-based reaction wastes from titanium dioxide production
<b>06 13</b>	<b>wastes from inorganic chemical processes not otherwise specified</b>
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides.
06 13 02*	spent activated carbon (except 06 07 02)
06 13 03	carbon black
06 13 04	wastes from asbestos processing
06 13 05*	Soot
<b>07</b>	<b>Wastes from Organic Chemical Processes</b>
<b>07 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 07*	halogenated still bottoms and reaction residues
07 01 08*	other still bottoms and reaction residues
07 01 09*	halogenated filter cakes and spent absorbents
07 01 10*	other filter cakes and spent absorbents
07 01 11*	sludges from on-site effluent treatment containing dangerous substances
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 01*	aqueous washing liquids and mother liquors
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 07*	halogenated still bottoms and reaction residues
07 02 08*	other still bottoms and reaction residues
07 02 09*	halogenated filter cakes and spent absorbents

07 02 10*	other filter cakes and spent absorbents
07 02 11*	sludges from on-site effluent treatment containing dangerous substances
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 13	waste plastic
07 02 14*	wastes from additives containing dangerous substances
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 16*	wastes containing dangerous silicones
07 02 17	wastes containing silicones other than those mentioned in 07 02 16
<b>07 03</b>	<b>wastes from the MFSU of organic dyes and pigments (except 06 11)</b>
07 03 01*	aqueous washing liquids and mother liquors
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 07*	halogenated still bottoms and reaction residues
07 03 08*	other still bottoms and reaction residues
07 03 09*	halogenated filter cakes and spent absorbents
07 03 10*	other filter cakes and spent absorbents
07 03 11*	sludges from on-site effluent treatment containing dangerous substances
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11
<b>07 04</b>	<b>wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides</b>
07 04 01*	aqueous washing liquids and mother liquors
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
07 04 07*	halogenated still bottoms and reaction residues
07 04 08*	other still bottoms and reaction residues
07 04 09*	halogenated filter cakes and spent absorbents

07 04 10*	other filter cakes and spent absorbents
07 04 11*	sludges from on-site effluent treatment containing dangerous substances
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 04 13*	solid wastes containing dangerous substances
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals</b>
07 05 01*	aqueous washing liquids and mother liquors
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 07*	halogenated still bottoms and reaction residues
07 05 08*	other still bottoms and reaction residues
07 05 09*	halogenated filter cakes and spent absorbents
07 05 10*	other filter cakes and spent absorbents
07 05 11*	sludges from on-site effluent treatment containing dangerous substances
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 13*	solid wastes containing dangerous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
<b>07 06</b>	<b>wastes from the MFSU of fats, grease, soaps, detergents, disinfectants</b>
07 06 01*	aqueous washing liquids and mother liquors and cosmetics
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 07*	halogenated still bottoms and reaction residues
07 06 08*	other still bottoms and reaction residues
07 06 09*	halogenated filter cakes and spent absorbents
07 06 10*	other filter cakes and spent absorbents
07 06 11*	sludges from on-site effluent treatment containing dangerous substances
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11

<b>07 07</b>	<b>wastes from the MFSU of fine chemicals and chemical products not otherwise specified</b>
07 07 01*	aqueous washing liquids and mother liquors
07 07 03*	organic halogenated solvents, washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 07*	halogenated still bottoms and reaction residues
07 07 08*	other still bottoms and reaction residues
07 07 09*	halogenated filter cakes and spent absorbents
07 07 10*	other filter cakes and spent absorbents
07 07 11*	sludges from on-site effluent treatment containing dangerous substances
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
<b>08</b>	<b>Wastes from Manufacture, Formulation, Supply and Use (MFSU) of Coatings (Paints, Varnishes and Vitreous Enamels), Adhesives, Sealants and Printing Inks</b>
<b>08 01</b>	<b>wastes from MFSU and removal of paint and varnish</b>
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 13*	sludges from paint or varnish containing organic solvents or other dangerous substances
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 17*	wastes from paint or varnish removal containing organic solvents or other dangerous substances
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances

08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 01 21*	waste paint or varnish remover
<b>08 02</b>	<b>wastes from MFSU of other coatings (including ceramic materials)</b>
08 02 01	waste coating powders
08 02 02	aqueous sludges containing ceramic materials
08 02 03	aqueous suspensions containing ceramic materials
<b>08 03</b>	<b>wastes from MFSU of printing inks</b>
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 12*	waste ink containing dangerous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 14*	ink sludges containing dangerous substances
08 03 15	ink sludges other than those mentioned in 08 03 14
08 03 16*	waste etching solutions
08 03 17*	waste printing toner containing dangerous substances
08 03 18	waste printing toner other than those mentioned in 08 03 17
08 03 19*	disperse oil
<b>08 04</b>	<b>wastes from MFSU of adhesives and sealants (including waterproofing products)</b>
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 11*	adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11
08 04 13*	aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous substances

08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other dangerous substances
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
08 04 17*	rosin oil
<b>08 05</b>	<b>wastes not otherwise specified in 08</b>
08 05 01*	waste isocyanates
<b>09</b>	<b>Wastes from the Photographic Industry</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixer solutions
09 01 05*	bleach solutions and bleach fixer solutions
09 01 06*	wastes containing silver from on-site treatment of photographic wastes
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06 A
<b>10</b>	<b>Wastes from Thermal Processes</b>
<b>10 01</b>	<b>wastes from power stations and other combustion plants (except 19)</b>
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)

10 01 02	Coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 04*	oil fly ash and boiler dust
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 09*	sulphuric acid
10 01 13*	fly ash from emulsified hydrocarbons used as fuel
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing dangerous substances
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 16*	fly ash from co-incineration containing dangerous substances
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 18*	wastes from gas cleaning containing dangerous substances
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 20*	sludges from on-site effluent treatment containing dangerous substances
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 22*	aqueous sludges from boiler cleansing containing dangerous substances
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 24	sands from fluidised beds
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
<b>10 02</b>	<b>wastes from the iron and steel industry</b>
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 07*	solid wastes from gas treatment containing dangerous substances

10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 11*	wastes from cooling-water treatment containing oil
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 13*	sludges and filter cakes from gas treatment containing dangerous substances
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
<b>10 03</b>	<b>wastes from aluminium thermal metallurgy</b>
10 03 02	anode scraps
10 03 04*	primary production slags
10 03 05	waste alumina
10 03 08*	salt slags from secondary production
10 03 09*	black drosses from secondary production
10 03 15*	skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 17*	tar-containing wastes from anode manufacture
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 19*	flue-gas dust containing dangerous substances
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 21*	other particulates and dust (including ball-mill dust) containing dangerous substances
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 23*	solid wastes from gas treatment containing dangerous substances
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23

10 03 25*	sludges and filter cakes from gas treatment containing dangerous substances
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 27*	wastes from cooling-water treatment containing oil
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 29*	wastes from treatment of salt slags and black drosses containing dangerous substances
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 01*	slags from primary and secondary production
10 04 02*	dross and skimmings from primary and secondary production
10 04 03*	calcium arsenate
10 04 04*	flue-gas dust
10 04 05*	other particulates and dust
10 04 06*	solid wastes from gas treatment
10 04 07*	sludges and filter cakes from gas treatment
10 04 09*	wastes from cooling-water treatment containing oil
10 04 10*	wastes from cooling-water treatment other than those mentioned in 10 04 09
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
10 05 01	slags from primary and secondary production
10 05 03*	flue-gas dust
10 05 04	other particulates and dust
10 05 05*	solid waste from gas treatment
10 05 06*	sludges and filter cakes from gas treatment
10 05 08*	wastes from cooling-water treatment containing oil
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08

10 05 10*	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
10 05 11	dross and skimmings other than those mentioned in 10 05 10
<b>10 06</b>	<b>wastes from copper thermal metallurgy</b>
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 03*	flue-gas dust
10 06 04	other particulates and dust
10 06 06*	solid wastes from gas treatment
10 06 07*	sludges and filter cakes from gas treatment
10 06 09*	wastes from cooling-water treatment containing oil
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 07*	wastes from cooling-water treatment containing oil
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
10 08 04	particulates and dust
10 08 08*	salt slag from primary and secondary production
10 08 09	other slags
10 08 10*	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
10 08 11	dross and skimmings other than those mentioned in 10 08 10

10 08 12*	tar-containing wastes from anode manufacture
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 15*	flue-gas dust containing dangerous substances
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances
10 08 18*	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 19*	wastes from cooling-water treatment containing oil
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
<b>10 09</b>	<b>wastes from casting of ferrous pieces</b>
10 09 03	furnace slag
10 09 05*	casting cores and moulds which have not undergone pouring containing dangerous substances
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 07*	casting cores and moulds which have undergone pouring containing dangerous substances
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 09*	flue-gas dust containing dangerous substances
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 11*	the particulates containing dangerous substances
10 09 12	other particulates other than those mentioned in 10 09 11
10 10 13*	waste binders containing dangerous substances
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 15*	waste crack-indicating agent containing dangerous substances

10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
<b>10 10</b>	<b>wastes from casting of non-ferrous pieces</b>
10 10 03	furnace slag
10 10 05*	casting cores and moulds which have not undergone pouring, containing dangerous substances
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 07*	casting cores and moulds which have undergone pouring, containing dangerous substances
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 09*	flue-gas dust containing dangerous substances
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 11*	other particulates containing dangerous substances
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 13*	waste binders containing dangerous substances
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 15*	waste crack-indicating agent containing dangerous substances
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 09*	waste preparation mixture before thermal processing, containing dangerous substances
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 11*	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)
10 11 12	waste glass other than those mentioned in 10 11 11

10 11 13*	glass-polishing and -grinding sludge containing dangerous substances
10 11 14	glass-polishing and -grinding sludge other than those mentioned in 10 11 13
10 11 15*	solid wastes from flue-gas treatment containing dangerous substances
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 19*	solid wastes from on-site effluent treatment containing dangerous substances
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
<b>10 12</b>	<b>wastes from manufacture of ceramic goods, bricks, tiles and construction products</b>
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 09*	solid wastes from gas treatment containing dangerous substances
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 11*	wastes from glazing containing heavy metals
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
<b>10 13</b>	<b>wastes from manufacture of cement, lime and plaster and articles and products made from them</b>
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)

10 13 07	sludges and filter cakes from gas treatment
10 13 09*	wastes from asbestos-cement manufacture containing asbestos
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 12*	solid wastes from gas treatment containing dangerous substances
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
<b>11</b>	<b>Wastes from Chemical Surface Treatment and Coating of Metals and other Materials; Non-Ferrous Hydro-Metallurgy</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)</b>
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 08*	phosphatising sludges
11 01 09*	sludges and filter cakes containing dangerous substances
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 11*	c
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 13*	degreasing wastes containing dangerous substances
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 01 15*	eluate and sludges from membrane systems or ion exchange systems containing dangerous substances
11 01 16*	saturated or spent ion exchange resins
11 01 98*	other wastes containing dangerous substances

<b>11 02</b>	<b>wastes from non-ferrous hydrometallurgical processes</b>
11 02 02*	sludges from zinc hydrometallurgy (including jarosite, goethite)
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 05	wastes from copper hydrometallurgical processes containing dangerous substances
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 02 07*	other wastes containing dangerous substances
<b>11 03</b>	<b>sludges and solids from tempering processes</b>
11 03 01*	wastes containing cyanide
11 03 02*	other wastes
<b>11 05</b>	<b>wastes from hot galvanising processes</b>
11 05 01	Hard Zinc
11 05 02	Zinc ash
11 05 03*	solid wastes from gas treatment
11 05 04*	Spent flux
<b>12</b>	<b>Wastes from Shaping and Physical and Mechanical Surface Treatment of Metals and Plastics</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)

12 01 08*	machining emulsions and solutions containing halogens
12 01 09*	machining emulsions and solutions free of halogens
12 01 10*	synthetic machining oils
12 01 12*	spent waxes and fats
12 01 13	welding wastes
12 01 14*	machining sludges containing dangerous substances
12 01 15	machining sludges other than those mentioned in 12 01 14
12 01 16*	waste blasting material containing dangerous substances
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil
12 01 19*	readily biodegradable machining oil
12 01 20*	spent grinding bodies and grinding materials containing dangerous substances
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
<b>12 03</b>	<b>wastes from water and steam degreasing processes (except 11)</b>
12 03 01*	aqueous washing liquids
12 03 02*	steam degreasing wastes
<b>13</b>	<b>Oil Wastes and Wastes of Liquid Fuels (except edible oils, and those in chapters 05, 12 and 19)</b>
<b>13 01</b>	<b>waste hydraulic oils</b>
13 01 01*	hydraulic oils, containing PCBs
13 01 04*	chlorinated emulsions
13 01 05*	non-chlorinated emulsions
13 01 09*	mineral-based chlorinated hydraulic oils
13 01 10*	mineral-based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils

13 01 13*	other hydraulic oils
<b>13 02</b>	<b>waste engine, gear and lubricating oils</b>
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
<b>13 03</b>	<b>waste insulating and heat transmission oils</b>
13 03 01*	insulating or heat transmission oils containing PCBs
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10	other insulating and heat transmission oils
<b>13 04</b>	<b>bilge oils</b>
13 04 01*	bilge oils from inland navigation
13 04 02*	bilge oils from jetty sewers
13 04 03*	bilge oils from other navigation
<b>13 05</b>	<b>oil/water separator contents</b>
13 05 01*	solids from grit chambers and oil/water separators
13 05 02*	sludges from oil/water separators
13 05 03*	interceptor sludges
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
13 05 08*	mixtures of wastes from grit chambers and oil/water separators

<b>13 07</b>	<b>wastes of liquid fuels</b>
13 07 01*	fuel oil and diesel
13 07 02*	Petrol
13 07 03*	Other fuels (including mixtures)
<b>13 08</b>	<b>oil wastes not otherwise specified</b>
13 08 01*	desalter sludges or emulsions
13 08 02*	other emulsions
<b>14</b>	<b>Waste Organic Solvents, Refrigerants and Propellants (except 07 and 08)</b>
<b>14 06</b>	<b>waste organic solvents, refrigerants and foam/aerosol propellants</b>
14 06 01*	chlorofluorocarbons, HCFC, HFC
14 06 02*	other halogenated solvents and solvent mixtures
14 06 04*	sludges or solid wastes containing halogenated solvents
14 06 05*	sludges or solid wastes containing other solvents
<b>15</b>	<b>Waste Packaging; Absorbents, Wiping Cloths, Filter Materials and Protective Clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
15 01 10*	packaging containing residues of or contaminated by dangerous substances
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 03	end-of-life tyres
16 01 04*	end-of-life vehicles
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components
16 01 07*	Oil filters
16 01 08*	components containing mercury
16 01 09*	components containing PCBs
16 01 10*	explosive components (for example air bags)
16 01 11*	brake pads containing asbestos
16 01 12	brake pads other than those mentioned in 16 01 11
16 01 13*	brake fluids
16 01 14*	antifreeze fluids containing dangerous substances
16 01 16	tanks for liquefied gas
16 01 15	antifreeze fluids containing dangerous substances
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	plastic
16 01 20	glass
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14

16 01 22	components not otherwise specified
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 09*	transformers and capacitors containing PCBs
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 01 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15*	hazardous components removed from discarded equipment
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 03*	inorganic wastes containing dangerous substances
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 05*	organic wastes containing dangerous substances
16 03 06*	organic wastes other than those mentioned in 16 03 05
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 04*	gases in pressure containers (including halons) containing dangerous substances
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
16 05 06*	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
16 05 07*	discarded inorganic chemicals consisting of or containing dangerous substances
16 05 08*	discarded organic chemicals consisting of or containing dangerous substances
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
<b>16 06</b>	<b>batteries and accumulators</b>

16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 06 06*	separately collected electrolyte from batteries and accumulators
<b>16 07</b>	<b>wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)</b>
16 07 08*	wastes containing oil
16 07 09*	wastes containing other dangerous substances
<b>16 08</b>	<b>wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)</b>
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 02*	spent catalysts containing dangerous transition metals <sup>3</sup> or dangerous transition metal compounds, <sup>3</sup> For the purpose of this entry, transition metals are: scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum. These metals or their compounds are dangerous if they are classified as dangerous substances. The classification of dangerous substances shall determine which among those transition metals and which transition metal compounds are hazardous.
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 08 04	spent fluid catalytic cracking catalysts (except 16 08 07)
16 08 05*	spent catalysts containing phosphoric acid
16 08 06*	spent catalysts containing phosphoric acid
16 08 07*	spent catalysts contaminated with dangerous substances
<b>16 09</b>	<b>oxidising substances</b>
16 09 01*	permanganates, for example potassium permanganate
16 09 02*	chromates, for example potassium chromate, potassium or sodium dichromate

16 09 03*	peroxides, for example hydrogen peroxide
16 09 04*	oxidising substances, not otherwise specified
<b>16 10</b>	<b>aqueous liquid wastes destined for off-site treatment</b>
16 10 01	aqueous liquid wastes containing dangerous substances
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03*	aqueous concentrates containing dangerous substances
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
<b>16 11</b>	<b>waste linings and refractories</b>
16 11 01*	carbon-based linings and refractories from metallurgical processes containing dangerous substances
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 03*	other linings and refractories from metallurgical processes containing dangerous substances
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 05*	linings and refractories from non-metallurgical processes containing dangerous substances
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
<b>17</b>	<b>Construction and Demolition Wastes (including excavated soil from contaminated sites)</b>
<b>17 01</b>	<b>Concrete, bricks, tiles and ceramics</b>
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06

<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
17 02 04*	glass, plastic and wood containing or contaminated with dangerous substances
<b>17 03</b>	<b>bituminous mixtures, coal tar and tarred products</b>
17 03 01*	bituminous mixtures containing coal tar
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 03 03*	coal tar and tarred products
<b>17 04</b>	<b>Copper, bronze, brass</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	Iron and steel
17 04 06	Tin
17 04 07	Mixed metals
17 04 09*	metal waste contaminated with dangerous substances
17 04 10*	cables containing oil, coal tar and other dangerous substances
17 04 11	cables other than those mentioned in 17 04 10
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 06 03*	soil and stones containing dangerous substances
17 06 04*	soil and stones other than those mentioned in 17 05 03
17 06 05*	dredging spoil containing dangerous substances
17 05 06	dredging spoil other than those mentioned in 17 05 05

17 05 07*	track ballast containing dangerous substances
17 05 08*	track ballast other than those mentioned in 17 05 07
<b>17 06</b>	<b>insulation materials and asbestos-containing construction materials</b>
17 06 01*	insulation materials containing asbestos
17 06 03*	other insulation materials consisting of or containing dangerous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
<b>17 08</b>	<b>gypsum-based construction material</b>
17 08 01*	gypsum-based construction materials contaminated with dangerous substances
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
<b>17 09</b>	<b>other construction and demolition wastes</b>
17 09 01*	construction and demolition wastes containing mercury
17 09 02*	construction and demolition wastes containing PCB
17 09 03	other construction and demolition wastes (including mixed wastes) containing dangerous substances
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
<b>18</b>	<b>Wastes from Human and Animal Health Care and/or Related Research (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 01	sharps (except 18 01 03)
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to
18 01 06*	chemicals consisting of or containing dangerous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 08*	cytotoxic and cytostatic medicines

18 01 09	medicines other than those mentioned in 18 01 08
18 01 10*	amalgam waste from dental care
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 01	sharps (except 18 02 02)
18 02 03*	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
18 02 05*	chemicals consisting of or containing dangerous substances
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 07*	cytotoxic and cytostatic medicines
18 02 08*	medicines other than those mentioned in 18 02 07
<b>19</b>	<b>Wastes from Waste Management Facilities, Off-site Waste Water Treatment Plants and the Preparation of Water Intended for Human Consumption and Water for Industrial Use</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 02	ferrous materials removed from bottom ash
19 01 05*	filter cake from gas treatment
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 07*	solid wastes from gas treatment
19 01 10*	spent activated carbon from flue-gas treatment
19 01 11*	bottom ash and slag containing dangerous substances
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 13*	fly ash containing dangerous substances
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 15*	boiler dust containing dangerous substances
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 17*	pyrolysis wastes containing dangerous substances
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17

19 01 19	sands from fluidised beds
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing dangerous substances
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing dangerous substances
19 02 09*	solid combustible wastes containing dangerous substances
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11	other wastes containing dangerous substances
<b>19 03</b>	<b>stabilised/solidified wastes</b>
19 03 04*	wastes marked as hazardous, partly stabilised
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 06*	wastes marked as hazardous, solidified
19 03 07	solidified wastes other than those mentioned in 19 03 06
<b>19 04</b>	<b>vitrified waste and wastes from vitrification</b>
19 04 01	vitrified waste
19 04 02*	fly ash and other flue-gas treatment wastes
19 04 03*	non-vitrified solid phase
19 04 04	aqueous liquid wastes from vitrified waste tempering
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost

<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
<b>19 07</b>	<b>landfill leachate</b>
19 07 02*	landfill leachate containing dangerous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 01	Screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 06*	saturated or spent ion exchange resins
19 08 07*	solutions and sludges from regeneration of ion exchangers
19 08 08*	membrane system waste containing heavy metals
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 10*	grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
19 08 11*	sludges containing dangerous substances from biological treatment of industrial waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
<b>19 09</b>	<b>wastes from the preparation of water intended for human consumption or water for industrial use</b>

19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 03*	fluff-light fraction and dust containing dangerous substances
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 05*	other fractions containing dangerous substances
19 10 06	other fractions other than those mentioned in 19 10 05
<b>19 11</b>	<b>wastes from oil regeneration</b>
19 11 01*	Spent filter clays
19 11 02*	acid tars
19 11 03*	aqueous liquid wastes
19 11 04*	wastes from cleaning of fuel with bases
19 11 05*	sludges from on-site effluent treatment containing dangerous substances
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
19 11 07*	wastes from flue-gas cleaning
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal

19 12 04	plastic and rubber
19 12 05	Glass
19 12 06*	wood containing dangerous substances
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
19 13 01*	solid wastes from soil remediation containing dangerous substances
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 03*	sludges from soil remediation containing dangerous substances
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 05*	sludges from groundwater remediation containing dangerous substances
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous substances
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07
<b>20</b>	<b>Municipal Wastes (Household waste and similar commercial, industrial and institutional wastes) Including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste

20 01 10	clothes
20 01 11	Textiles
20 01 13*	solvents
20 01 14*	Acids
20 01 15*	alkalines
20 01 17*	phytochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 31*	cytotoxic and cytostatic medicines
20 01 32	medicines other than those mentioned in 20 01 31
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 37*	wood containing dangerous substances
20 01 38	wood other than that mentioned in 20 01 37

20 01 39	plastics
20 01 40	Metals
20 01 41	wastes from chimney sweeping
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 07	Bulky waste

## 6 ENVIRONMENTAL RISK ASSESSMENT

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An assessment of the environmental risks presented by the development and operation of a HWTS on site has been undertaken. In accordance with the Environment Agency's requirements for risk assessments ([Risk assessments for your environmental permit - GOV.UK](#)), the proposed development and operations have been assessed with regards to their potential to generate significant environmental consequences.

The environmental risk assessment is provided which:

1. Identifies and considers the risks for the site and the sources of the risks;
2. Identifies the receptors at risk from the site;
3. Identifies the possible pathways from the sources of the risks to the receptors;
4. Identifies appropriate risk management techniques to control the risks, as necessary; and
5. Assesses the overall risks to determine if they can be screened out as insignificant.

Although included within the qualitative environmental risk assessment, the following risks have been screened out of further detailed assessment as there are not expected to be significant impacts at offsite receptors:

1. Impacts of point source emissions to air – there will be two point source emissions to air from the Seal Sands HWTS treated via an adsorption filter. The emissions to air will not be the source of significant emissions and air will be displaced passively associated with the batch operations of pumping liquids into and out of the tanks.
2. Impacts of visible emissions from stacks – there will be no visible emissions from stacks from the Seal Sands HWTS.
3. Impacts of discharges to sewer and surface water – a SWPA has been undertaken for the indirect emissions to surface water from Seal Sands HWTS. This assessment shows that discharge concentrations which achieve BAT-AELs would not cause an exceedance of the associated EQS values.
4. Impacts of fugitive odour emissions – the risk of odour being released by the site operations is low because odorous wastes accepted at the site are typically stored within suitable, primary packaging that is designed to contain the wastes and inside of an enclosed building. Additionally, due to the distance to the nearest sensitive residential receptors, which is approximately 3.8 km,



no detailed modelling is proposed but an odour management plan (OMP) has been produced to prevent and minimise odour impacts and prevent these impacts at off-site receptors.

- Impacts of fugitive noise and vibration emissions – the distance between the site and the nearest residential receptors is approximately 3.8 km and therefore due to this distance, no noise impact assessment is required. If required as a result of substantiated noise complaints being received by the operator, a noise and vibration management plan (NVMP) will be implemented. The need for this NVMP will be reviewed at least annually.

This approach has been agreed with the Environment Agency during pre-application discussions following an assessment of the Environment Agency’s Noise Advisory Tool (version 1.4). A screenshot of the assessment is provided below:

**Figure 6-1 - Noise Advisory Tool Evaluation**

Version: 1.4

Step 1: To be completed for all applications

Noise Advisory Tool		
Site Name:		Application Reference:
<b>input details of the site AFTER the variation is complete</b>		
	Select from the drop-down lists	Evidence your decision here
1. Activity Type	Waste recycling transfer/treatment/processing	The activity will be a waste transfer site with some treatment activities.
2. Activity Containment	External operations with processing and storage	The site activities will include both internal and external waste storage, deliveries, waste handling and waste processing. Although the majority of this will be internal, some activities will also take place outside of the building.
3. Operation at night	No	The normal operating hours of the site will be between 0700 - 2300 and not during the nighttime period.
4. Operation Size	large	Based on the guidance, the site will be classified as 'Large' as the proposed tonnage is >75,000 tonnes
5. Input distance from site to the nearest (or proposed) noise sensitive receptor (m)	>1000	The nearest sensitive noise receptor is approx 3.8 km to the south.
6. Residential receptor Location	urban	Based on the guidance, the location is classified as 'Urban' due to the industrial nature of the location.
7. Residential receptor proximity to other major noise source (m) e.g. busy road, other industrial activities, etc.	101-200	Residential receptors are located close to other sources of noise including a main 'A' road and other industrial activities
<small>The result will automatically update when the values are selected from the drop down menus</small>		
Evaluation	<b>NIA and NMP are not required*</b>	
<small>*The Environment Agency reserves the right to request the submission of an NIA or NMP independent of the outcome of noise advisory tool</small>		



6. Impacts of releases to air from fugitive emissions - the risk of fugitive emissions to air of dusts, particulates, VOCs, flies, vermin mud and litter is low because all wastes accepted at the HWTS are accepted in suitable waste containers that is designed to contain the wastes and wastes are stored inside of an enclosed building. A Dust and Emissions Management Plan has been prepared that explains how fugitive emissions will be prevented and minimised.

## 6.1 RISK ASSESSMENT METHODOLOGY

The assessment methodology follows a system that assigns a probability of exposure of a hazard event occurring, and, a resulting consequence of the event on the environment. These are categorised as either: High, Medium or Low and qualified as follows:

**Table 6-1 - Risk Assessment Terminology**

Classification	Probability of Exposure	Consequence
Low	The probability of a hazard event is low and is not likely to occur regularly in the long-term. A hazard event may occur on a less than yearly basis.	The harm caused is low, minor and short-term. A small quantity release has occurred. Non-permanent health effects are prevented using appropriate PPE. Minor surface damage is caused which can be immediately repaired.
Medium	The probability of a hazard event is medium when it is possible for this hazard to occur periodically but less than twice per year.	The harm caused is noticeable but not significant. The quantity released requires remediation of the receiving media. Potential for nuisance health effects which are not permanent. Damage is caused to the environment/built environment which will require repair.



High	The probability of the hazard event is high as this is certain to occur on a very frequent daily or weekly basis.	<p>The harm caused is wide-ranging with a long lasting effect.</p> <p>A very large release occurs with an immediate impact on the receiving media.</p> <p>There is a chronic or acute impact on human health</p> <p>Damage caused is significant and may require complete replacement or substantial repair which prevents use of an asset.</p>
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The assessment then considers all of the mitigation measures which reduces the risk of an event occurring or mitigates the consequence of the hazard. Following the risk management, the overall risk that remains is assigned a risk magnitude based on:

**Table 6-2 - Risk Assessment Risk Matrix**

	Consequence		
Probability	Low	Medium	High
Low	Low	Low	Medium
Medium	Low	Medium	High
High	Medium	High	High

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Protected Habitats and Protected Species						
Emissions to water	Surface water and ground water bodies  Harm to protected species.  Harm to protected habitats	Transfer pipeline (indirectly)  Discharges to surface waters.  Discharges to soil and percolation through soil and to groundwater	Low – hazard is not likely to occur	Medium – this hazard could cause harm at protected habitats and towards protected species but only in the event of an untreated discharge.	<p>There are records of protected species within the screening distance of the site (up to 2 km) including: Atlantic Salmon migratory route, European Eel, European Eel migratory route, River Lamprey migratory route and Sea Lamprey migratory route. The nearest protected habitat is approx. 0.5 km from the site.</p> <p>There are no direct discharges to surface water from the site operations. The site is of impermeable construction and bunded which would prevent direct discharges to ground water. Waste waters are captured within the drainage system, pumped to an Effluent Discharge Tank and subject to testing prior to release. Waste waters that do not meet emission limits are removed from the site via tanker transfer.</p> <p>A SWPRA completed on indirect discharges from the site shows that concentration limits aligned to BAT-AELs would not cause exceedances of environmental quality standards</p>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					values for the River Dees, which is the receiving water body.  Wastes are stored within suitable packaging when in storage, with liquid wastes banded or placed onto portable bunds to minimise the risk of leaks impacting on the environment.  Waste waters are transferred to appropriate off-site treatment facilities. Prior to discharge, waste waters are sampled to identify the most suitable disposal route.	
Emissions to air	Harm to protected species.  Harm to protected habitats	Air/wind transportation then inhalation  Deposit on ground	Low	Low – this hazard is not likely to harm protected habitats and protected species.	There are records of protected species within the screening distance of the site (up to 2 km) including: Atlantic Salmon migratory route, European Eel, European Eel migratory route, River Lamprey migratory route and Sea Lamprey migratory route. The nearest protected habitat is approx. 0.5 km from the site.  Point-source emissions to air will be to small passive vents used to abate headspace air from within two storage tanks that contain predominantly water from the site. Water will be tested prior to	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
discharge into each tank and normally consist of water that has been subject to treatment on site. Discharges to air will be small volume, periodic releases.  Wastes are totally enclosed within suitable packaging when in storage, which will minimise fugitive emissions to air.  Waste treatment takes place inside of totally enclosed buildings within the main Warehouse or the site Workshop which will minimise fugitive emissions to air.  Waste treatment and storage inside of tanks is enclosed and tanks are bunded to prevent leaks from impacting on the environment.  Good site housekeeping practices prevent the accumulation of dust, mud or litter which could be subject to wind dispersion.						
Discharges to Sewer and surface water						
Leaks from buried pipework	Surface water and ground water bodies	Transfer pipeline	Low – hazard is not likely to occur	Medium –this hazard could cause harm if a hazardous material is	The site is not located within a Source Protection Zone (SPZ).  Regular inspections of aboveground transfer pipeline will identify leaks at	Low



<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
	Harm to aquatic species.  Harm to protected species.	Discharges to surface waters.  Discharges to soil and percolation through soil and to groundwater		leaked and leaves the site	<p>the earliest possible opportunity. Current design of the site includes aspects of the drainage system which are subsurface however this infrastructure has been subject to recent drainage survey to confirm its suitability. Remedial repairs have been completed to defective pipework.</p> <p>Pipes/pumps will be maintained to avoid any corrosion with the use of corrosion-resistant pipework and the replacement of aging pipework when it is necessary.</p> <p>In event of a leak, follow site spillage response plan and inform relevant site personnel and relevant authorities.</p> <p>Spill kits are provided around the site which can be used to contain a spillage and direct it towards site drainage. Staff are trained in their use.</p>	
Failure of the treatment process leading to discharge of	Offsite waste water treatment plant.	Transfer pipeline  Discharges to surface waters.	Low – hazard is not likely to occur	Medium –this hazard could cause harm if a hazardous material leaves the site.	CWR will only accept waste that can be treated properly by the site’s relevant treatment processes.  All wastes will be subject to extensive pre-acceptance and	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
<p>oil or sludge to sewer.</p>	<p>Surface water and ground water bodies</p> <p>Harm to aquatic species.</p> <p>Harm to protected species.</p>	<p>Discharges to soil and percolation through soil and to groundwater</p>			<p>acceptance checks, with records made about each consignment accepted at the site.</p> <p>Incoming waste will require laboratory analysis or written characterisation of incoming waste before acceptance e.g. visual and column sampling.</p> <p>Staff are trained in operation of treatment facility with understanding of the treatment processes and hazard identification. Treatment takes place on impermeable surfaces with a sealed drainage system.</p> <p>Transfer/pumping operations is a manual process controlled by trained and competent staff.</p> <p>Discharges of effluents/waste waters to off-site locations will be subject to monitoring prior to discharge and is a batch process. In the event that sampling identifies potentially polluting substances, further treatment will take place prior to discharge.</p>	

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Acceptance of non-conforming waste.	Offsite waste water treatment plan.  Surface water and ground water bodies  Harm to aquatic species.  Harm to protected species.	Discharges to surface waters.  Discharges to soil and percolation through soil and to groundwater	Low – hazard is not likely to occur	Medium –this hazard could cause harm if a hazardous material leaves the site.	CWR follows strict pre-acceptance procedures prior to delivery to the site to ensure no non-conforming wastes are delivered to the site. Site operates a strict booking-in system to prevent unauthorised and unexpected loads.  Incoming waste will require visual inspection to ensure they match the declared waste type. Incoming waste will be subject to compatibility testing via laboratory analysis.  Staff are trained in operation of treatment facility with understanding of the treatment processes and hazard identification.  CWR has clear procedures for the rejection and safe removal of non-conforming waste from the site.  Offsite waste water treatment provides a full treatment chain and has been designed to treat effluents from the wider Seal Sands Industrial Estate. Discharge is in accordance with agreement in place with Northumbrian Water Limited.  Discharges will be in accordance with limits specified within the	Low



<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					Environmental Permit (when issued).	
Emissions of Odour						
Odour from delivery of wastes	Occupants of Seal Sands Industrial Estate and residents and businesses beyond the boundary of the Seal Sands Industrial Estate.	Air/wind transportation then inhalation	High – hazard is likely to occur on a daily basis	Low adverse odour impact on local receptors.	<p>Residential and sensitive human receptors are not located within close proximity of the site. The nearest receptors are residential properties are approx. 3.8 km to the southwest. Deliveries of waste will be a central location, approx. 100 metres from the site perimeter.</p> <p>Site will implement an Odour Management Plan to control and minimise emissions of odour.</p> <p>All waste is packaged correctly and carried in suitable vehicles (e.g. tankers) to prevent escape. Hazardous waste is delivered in type approved packaging, in accordance with the carriage of dangerous goods legislation (as required) which contains odour sources.</p> <p>Drivers follow strict pre-acceptance inspections to ensure no malodorous wastes are delivered to site. If the load is judged to be too malodorous the driver will contact the weighbridge office for further</p>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					instruction on transporting the waste to another waste management facility (if deemed necessary).  Wind conditions will be monitored & Operations may cease until conditions improve.  Odour complaints to be investigated immediately in accordance with procedures within the EMS.	
Odour from handling and storage of wastes (e.g. biodegradable waste, waste containing hydrogen sulphide)	Occupants of Seal Sands Industrial Estate and residents and businesses beyond the boundary of the Seal Sands Industrial Estate.	Air/wind transportation then inhalation	High – hazard is likely to occur on a daily basis (due to nature of the wastes handled)	Low adverse odour impact on local receptors.	Residential and sensitive human receptors are not located within close proximity of the site. The nearest receptors are residential properties are approx. 3.8 km to the southwest.  Site will implement an Odour Management Plan to control and minimise emissions of odour.  Storage and treatment of waste materials are conducted in the confines of the site perimeter and within buildings which would act as a physical barrier to the transmission of odour.  All waste accepted at the site is contained/covered already (in bins/bags) so the pathway link is broken. Highly odorous	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					biodegradable wastes will be rejected from the site.  Sampling and treatment of wastes with the potential to be odorous will take place inside of a building at all times.  Storage times will be minimised to reduce odour impact. The site will operate on a first in, first out (FIFO) basis to manage volumes and throughputs. Ongoing monitoring and inspection of wastes stored. If malodorous wastes are identified whilst being stored onsite, they will be isolated, enclosed and promptly removed from the site.  Only competently trained operatives complete loading operations to ensure they are carried out efficiently and effectively. Wind conditions will be monitored & Operations may cease until conditions improve.  Odour complaints to be investigated immediately in accordance with procedures within the EMS.	

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Odour from treatment of wastes	Occupants of Seal Sands Industrial Estate and residents and businesses beyond the boundary of the Seal Sands Industrial Estate.	Air/wind transportation then inhalation	Medium – hazard is not likely to occur regularly	Low adverse odour impact on local receptors.	<p>Residential and sensitive human receptors are not located within close proximity of the site. The nearest residential properties are approx. 3.8 km to the southwest.</p> <p>Waste treatment will consist of bulking, blending and repackaging operations that are located inside of a building or via enclosed containers (e.g. oil/water separation within an enclosed tank).</p> <p>Waste treatments are conducted in the confines of the site perimeter and inside of enclosed buildings which prevent the transmission of odour. Wastes known to be odorous and containing hydrogen sulphide (from pre-acceptance stage) will not be subject to waste treatment operations to eliminate an odour source.</p> <p>Site staff undertaking waste treatment activities are fully trained and competent to ensure they are carried out efficiently and effectively. Wind conditions will be monitored &amp; Operations may cease until conditions improve.</p>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
<p style="text-align: right;">Odour complaints to be investigated immediately in accordance with procedures within the EMS.</p>						
<b>Noise and Vibration</b>						
Noise and vibration from vehicles associated with waste movements to and from the site	Local residents and businesses beyond the boundary of the Seal Sands Industrial Estate.  Ecological receptors.	Generation of noise with air transportation  Generation of vibrations with ground transmission to local receptors.	High – hazard is likely to occur on a daily basis	Low – hazard may result in some loss of amenity	The site is located within an existing industrial estate which already has an established background level of industrial noise.  Residential and sensitive human receptors are not located within close proximity of the site, the nearest residential properties area approx. 3.8 km away.  Deliveries will take place during normal operating hours of the site and vehicle movements will be subject to site rules which will include site speed limit and anti-idling measures. Use of vehicles by CWR staff is restricted to suitably trained individuals who are familiar with its operation and will be able to identify abnormal noise emissions.  Where deliveries are made by third-parties, drivers will receive a copy of the site rules and supervised while on site.	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					Vehicle reversing to be minimised where possible to reduce use of reversing alarms. Site speed limit of 5mph and anti-idling policy will be enforced on site.  Any noise issues or complaints to be investigated immediately in accordance with procedures within the EMS.	
Noise and vibration from vehicle movements associated with site operations	Local residents and businesses beyond the boundary of the Teesside Terminal.  Ecological receptors.	Generation of noise with air transportation  Generation of vibrations with ground transmission to local receptors.	High – hazard is likely to occur on a daily basis	Low – hazard may result in some loss of amenity	The site is located within an existing industrial estate which already has an established background level of industrial noise.  Residential and sensitive receptors are not located within close proximity of the site. The nearest ecological site is approx. 0.5 km to the north.  The design of the site and the buildings and structures associated with the site will act as a physical barrier to transmission and will reduce emissions of noise.  Vehicle movements will take place during normal operating hours of the site between 6am-6pm. CWR vehicles will be subject to daily vehicle checks, correctly maintained	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					to minimise noise and vibration, will adhere to site rules, speed limits and anti-idling measures. Defective equipment and vehicles will be taken out of service and defects will be promptly fixed.  Only staff with suitably training are permitted to operate site vehicles. Individuals are familiar with their operation and will be able to identify abnormal noise emissions.	
Noise and vibration from normal operation of site equipment	Local residents and businesses beyond the boundary of Seal Sands Industrial Estate.  Ecological receptors.	Generation of noise with air transportation  Generation of vibrations with ground transmission to local receptors.	High – hazard is likely to occur on a daily basis	Low – hazard may result in some loss of amenity	The site is located within an existing industrial estate which already has an established background level of industrial noise.  Residential and sensitive receptors are not located within close proximity of the site. The nearest ecological site is approx. 0.5 km to the north.  The site will not be a source of noisy equipment. Low noise, electrical pumps will normally be used for pumping. Small air diaphragm pumps will be used for bulking operations but will also be low noise. The design of the site and the buildings and structures associated with the site will act as a physical	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					barrier to transmission and will reduce emissions of noise from pumping operations. These will typically be enclosed inside of the main Warehouse building. Pumping operations will be discontinuous and operate during the normal operation hours of the site, which reduces the likelihood of noise during antisocial hours.  Equipment will be subject to regular inspection and maintenance schedules to maintain operational performance.  Operatives complete daily defect checks on all equipment prior to operation. In the event of a mechanical issue with the equipment it will be isolated pending repair.  Operatives are trained in noise management to minimise emissions of noise. Operatives will report incidents of any abnormal noise so that it can be rectified. Any noise issues or complaints to be investigated immediately in accordance with procedures within the EMS.	

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Noise from handling and treatment of wastes	Local residents and businesses beyond the boundary of the Teesside Terminal.  Ecological receptors.	Generation of noise with air transportation  Generation of vibrations with ground transmission to local receptors.	High – hazard is likely to occur on a daily basis	Low – hazard may result in some loss of amenity	<p>The site is located within an existing industrial estate which already has an established background level of industrial noise.</p> <p>Residential and sensitive receptors are not located within close proximity of the site. The nearest ecological site is approx. 0.5 km to the north.</p> <p>Treatment of waste takes place inside of enclosed tanks or buildings. The site will not be a source of noisy equipment but will utilise small air diaphragm pumps for pumping operations.</p> <p>The design of the site and the buildings and structures associated with the site will act as a physical barrier to transmission will reduce emissions of noise.</p> <p>Waste handling and treatment operations will operate during the normal operation hours of the site which reduces the likelihood of noise during antisocial hours.</p> <p>Relevant plant and equipment will be subject to regular inspection and</p>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					<p>maintenance schedules to maintain operational performance.</p> <p>All Equipment/Machinery have daily defect checks completed by operators, with all defects reported to senior management for rectification. Operatives are trained in noise management and the prompt reporting of any abnormal noise so that it can be rectified. Any noise issues or complaints to be investigated immediately in accordance with procedures within the EMS.</p>	
Noise from loading of wastes onto vehicles	Local residents and businesses beyond the boundary of the Seal Sands Industrial Estate.  Ecological receptors.	Generation of noise with air transportation  Generation of vibrations with ground transmission to local receptors.	High – hazard is likely to occur on a daily basis	Low – hazard may result in some loss of amenity	<p>The site is located within an existing industrial estate which already has an established background level of industrial noise.</p> <p>Residential and sensitive receptors are not located within close proximity of the site. The nearest ecological site is approx. 0.5 km to the north.</p> <p>Loading of materials conducted within the confines of the site perimeter. The design of the site and the buildings and structures associated with the site will act as a</p>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					<p>physical barrier to transmission will reduce emissions of noise.</p> <p>Vehicle movements will take place during normal operating hours of the site. CWR vehicles will be subject to daily vehicle checks, correctly maintained to minimise noise and vibration, will adhere to site rules, speed limits and anti-idling measures. Defective equipment and vehicles will be taken out of service and defects will be promptly fixed. Only staff with suitably training are permitted to operate site vehicles. Individuals are familiar with their operation and will be able to identify abnormal noise emissions.</p> <p>Materials are placed within removal vehicles and not dropped from a height, reducing the potential impact of noise &amp; vibration.</p> <p>All Equipment/Machinery have daily defect checks completed by operators, with all defects reported to senior management for rectification. Operatives are trained in noise management and the prompt reporting of any abnormal noise so that it can be rectified.</p>	

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					Any noise issues or complaints to be investigated immediately in accordance with procedures within the EMS.	
Noise and vibration from vehicle movements associated with raw material deliveries	Local residents and businesses beyond the boundary of Seal Sands Industrial Estate. Ecological receptors.	Generation of noise with air transportation  Generation of vibrations with ground transmission to local receptors.	Medium – It is possible for this hazard to occur regularly.	Low – hazard may result in some loss of amenity	The site is located within an existing industrial estate which already has an established background level of industrial noise.  Residential and sensitive receptors are not located within close proximity of the site. The nearest ecological site is approx. 0.5 km to the north.  Deliveries will take place during normal operating hours between 6am-6pm and vehicle movements will be subject to site rules which will include site speed limit and anti-idling measures.  Vehicle reversing to be minimised where possible through the implementation of a one-way transport route around the site to reduce use of reversing alarms.  Any noise issues or complaints to be investigated immediately in accordance with procedures within the EMS.	Low



<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Fugitive Emissions						
Fugitive emissions of dust and particulates from waste deliveries	Human receptors in nearby industrial estate.  Residential receptors.  Ecological receptors	Emissions to air and wind dispersion.  Inhalation by human and animal receptors.  Nuisance impact from dust	Medium – It is possible for this hazard to occur regularly.	Medium– this hazard could cause some harm	<p>The site is not located within close proximity of sensitive human receptors. The nearest ecological site is approx. 0.5 km to the north. Wider site roads and surfaces are impermeable concrete and asphalt.</p> <p>All waste materials are delivered to a central location, approx. 100 metres from the site perimeter in suitable vehicles (e.g. tankers, curtain-sider goods vehicles) to prevent escape. Waste is delivered type approved packaging, in accordance with the carriage of dangerous goods legislation (as required) which prevents sources of fugitive emissions. Waste is not carried loose/in bulk.</p> <p>The site has a Fugitive Emissions Management Plan which will be followed. In the event of abnormal weather conditions, operations may be temporarily paused.</p> <p>Complaints about dust/particulates will be investigated immediately in accordance with procedures within the EMS.</p>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Fugitive emissions of dust and particulates from handling and treatment of waste	Human receptors in nearby industrial estate.  Residential receptors.  Ecological receptors	Emissions to air and wind dispersion.  Inhalation by human and animal receptors.  Nuisance impact from dust	Low – hazard is not likely to occur	Low – hazard may result in some loss of amenity	<p>The site is not located within close proximity of sensitive human receptors. The nearest ecological site is approx. 0.5 km to the north.</p> <p>There is a low risk of dust and particulates from the wastes handled which are predominantly liquid wastes within bulk containers.</p> <p>Dusty and powdery waste will only be accepted within waste containers and will not be subject to physical bulking.</p> <p>Waste treatment, including bulking of wastes will take place inside of enclosed tanks and enclosed buildings.</p> <p>CWR staff are suitably trained in handling and treatment of waste to ensure treatment is appropriate and minimises emissions of dust or particulates.</p> <p>The site has a Fugitive Emissions Management Plan which will be followed. In the event of abnormal weather conditions, operations may be temporarily paused.</p> <p>Complaints about dust/particulates will be investigated immediately in</p>	Low



<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					accordance with procedures within the EMS.	
Fugitive emissions of dust and particulates from handling and storage of waste	Human receptors in nearby industrial estate. Residential receptors. Ecological receptors	Emissions to air and wind dispersion. Inhalation by human and animal receptors. Nuisance impact from dust.	Low – hazard is not likely to occur	Low – hazard may result in some loss of amenity	The site is not located within close proximity of sensitive human receptors. The nearest ecological site is approx. 0.5 km to the north. There is a low risk of dust and particulates from the wastes handled which are predominantly liquid wastes within bulk containers. Any dusty and powdery waste handled/stored on site will be within suitable waste containers within an enclosed building. CWR staff are suitably trained in handling and storage techniques to minimise emissions of dust or particulates. Site housekeeping and regular cleaning will remove sources of dust from impermeable surfaces within the site. The site has a Fugitive Emissions Management Plan which will be followed. Complaints about dust/particulates will be investigated immediately in accordance with procedures within the EMS.	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Fugitive emissions from spillages of waste	Surface water and ground water bodies  Harm to aquatic species.  Harm to protected species.	Discharges to surface waters.  Discharges to soil and percolation through soil and to groundwater	Medium - it is possible for this hazard to occur from spillages	Medium –this hazard could cause harm if a hazardous material is spilt and leaves the site	The nearest surface water is a small pond approx. 30m to the south of the site. The nearest main river, the River Tees is located approx. 0.525 km to the north east. There are no direct discharges to surface water bodies.  The site is constructed of impermeable surfaces with a contained drainage system which would contain any spillage and prevent its discharge into the environment.  Liquid wastes will be stored in suitable primary containers inside of a bund. Bunds will be suitably designed e.g. to contain 110% of the volume or 25% of the total storage volume. Incompatible materials will be stored within separate bunds. Bunds will be subject to regular inspection for leaks and damage with remedial action carried out as required.  Specific wastes are stored inside of suitable containers which contain potential spillages: <ul style="list-style-type: none"> <li>• Asbestos waste (double bagged inside of a container)</li> </ul>	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					<ul style="list-style-type: none"> <li>• Aerosol waste (under cover within a cage)</li> <li>• Batteries and accumulators (within leakproof containers)</li> <li>• Fluorescent tubes and lamps (leakproof containers)</li> <li>• Food waste (within a building and inside of sealed containers)</li> </ul> <p>In event of a spillage, follow site spillage response plan and inform relevant site personnel and relevant authorities.</p> <p>Spill kits are provided around the site which can be used to contain a spillage and direct it towards site drainage. Staff are trained in their use.</p>	
Spillages of liquid wastes including hazardous chemicals and oils	Surface water and ground water bodies  Harm to aquatic species.  Harm to protected species.	Discharges to surface waters.  Discharges to soil and percolation through soil and to groundwater	Medium - it is possible for this hazard to occur from spillages	Medium –this hazard could cause harm if a hazardous material is spilt and leaves the site	The nearest surface water is a small pond approx. 30m to the south of the site. The nearest main river, the River Tees is located approx. 0.525 km to the north east. There are no direct discharges to surface water bodies.  The site is constructed of impermeable surfaces with a	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					contained drainage system which would contain any spillage and prevent its discharge into the environment.  Liquid wastes will be stored in suitable primary containers (e.g. IBCs, drums) and placed on portable bunds. Bunds will be subject to regular inspection for leaks and damage with remedial action carried out as required.  In event of a spillage, follow site spillage response plan and inform relevant site personnel and relevant authorities.  Spill kits are provided around the site which can be used to contain a spillage and direct it towards site drainage. Staff are trained in their use.  Incidents and accidents will be recorded on the company electronic reporting system, investigated and trends analysed.	
Spillages of wastes from storage within tanks	Surface water and ground water bodies	Discharges to surface waters.	Low – hazard is not likely to occur	High – could result in significant harm if a hazardous material is spilt and leaves the site.	The nearest surface water is a small pond approx. 30m to the south of the site. The nearest main river, the River Tees is located approx. 0.525	Medium

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
	Harm to aquatic species	Discharges to soil and percolation through soil and to groundwater			<p>km to the North East. There are no direct discharges to surface water bodies.</p> <p>The site is constructed of impermeable surfaces with a contained drainage system which would contain any spillage and prevent its discharge into the environment. Storage tanks will be subject to regular visual inspection with a planned preventative maintenance system in place.</p> <p>The largest single tank contains a maximum of 1,000m<sup>3</sup>. Storage tanks will be bunded to contain 110% of the volume. Bunds will be subject to regular inspection for leaks and damage. Accumulated rainfall will be removed as required.</p> <p>In event of a spillage, follow site spillage response plan and inform relevant site personnel and relevant authorities.</p> <p>Spill kits are provided around the site which can be used to contain a spillage and direct it towards site drainage. Staff are trained in their use.</p>	

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					Incidents and accidents will be recorded on the company electronic reporting system, investigated and trends analysed.	
Fugitive emissions of solid waste resulting in litter	Local residences  Adjacent Land  Water	Discharges to surface waters.  Emissions to air and wind dispersion.  Inhalation by human and animal receptors.  Nuisance impact from litter	Medium - it is possible for this hazard to occur from leaks	Low – hazard may result in some loss of amenity	The site is not located within close proximity of sensitive human receptors. The nearest ecological site is approx. 0.5 km to the north.  The nearest surface water is a small pond approx. 30m to the south of the site. The nearest main river, the River Tees is located approx. 0.525 km to the North East.  The site includes a number of buildings and bunds which would act as physical barriers to off-site dispersion. Waste types that pose a risk of windblown litter will be stored and treated within a building. The site has a perimeter fence which would contain litter.  The site will only accept suitable wastes that can be stored and treated in accordance with the permit. Waste is normally accepted inside of sealed containers which reduces the likelihood of generation of litter.	Low

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
					<p>Site housekeeping and regular inspections will remove sources of litter within the site.</p> <p>CWR staff are suitably trained in handling and treatment of waste to ensure treatment is appropriate and minimises generation of litter.</p> <p>Complaints about litter will be investigated immediately in accordance with procedures within the EMS.</p>	
Deposition of mud onto local roads and roads within the industrial estate	Surface water and ground water bodies  Harm to aquatic species  Local residences  Adjacent Land	Discharges to surface waters.  Discharges to soil and percolation through soil and to groundwater	Medium –it is possible for this hazard to occur	Low – hazard may result in some loss of amenity	<p>The site is not located within close proximity of sensitive human receptors. The nearest ecological site is approx. 0.5 km to the north.</p> <p>All internal roads, storage and processing areas will be hard-surfaced with concrete or tarmac. If required, a road sweeper will be hired to clean access routes and main trafficked areas on site.</p> <p>Complaints about mud will be investigated immediately in accordance with procedures within the EMS.</p>	Low
Bioaerosols and dust						

<b>Hazard</b> What has the potential to cause harm?	<b>Receptor</b> What is at risk? What do I wish to protect?	<b>Pathway</b> How can the hazard get to the receptor?	<b>Probability of Exposure</b> How likely is this contact?	<b>Consequence</b> What is the harm that can be caused?	<b>Risk Management</b> What measures will you take to reduce the risk? If it occurs who is responsible for what?	<b>What is the Overall Risk?</b> What is the risk that still remains?
Release bioaerosols and dust from handling of waste	Human receptors in nearby industrial estate. Residential receptors.  Ecological receptors	Emissions to air and wind dispersion.  Inhalation by human and animal receptors causing illness  Nuisance impact from dust	Medium –it is possible for this hazard to occur	Medium – hazard may result in loss of amenity	The site is not located within 250 metres of where sensitive human receptors live. However, there are workplaces within 250 metres to the north and south which may be the location of sensitive receptors.  The Seal Sands HWTS does not treat waste via compositing, anaerobic digestion or mechanical biological treatment  Biodegradable, dusty and powdery waste will only be accepted within waste containers and will not be subject to physical bulking. See permitted wastes for transfer in containers only - Table 5-4. Storing these wastes in containers reduces the likelihood of dust/bioaerosol emissions.  CWR staff are suitably trained in handling and treatment of waste to ensure treatment is appropriate and minimises emissions of dust or particulates.  Site housekeeping and regular cleaning will remove sources of dust from impermeable surfaces within the site.	Low



## 7 BAT ASSESSMENT

BREF Requirements	Current / Proposed Arrangements	BAT?
<b>General Bat Conclusions</b>		
<p><b>BAT 1:</b> In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all required features.</p>	<p>Cumbria Waste Group has an EMS that is certified to ISO14001:2015 that incorporates all of the required features to improve overall environmental performance. The EMS is externally certified and the scope of the current EMS will be extended to include this HWTS. The EMS has the commitment of senior management and the SHEQ policy commits to continuous improvement and compliance with legal legislation and contractual requirements. Procedures are in place to establish suitable company objectives and resources are allocated in order for suitably competent staff to deliver the company objectives. The company reviews and revises the SHEQ policy at regular intervals and uses both internal and external audits to identify improvement opportunities, including the use of cleaner technology which may bring about an environmental benefit. The EMS for Seal Sands HWTS includes the necessary management plans in order to provide a high level of environmental protection.</p>	✓
<p><b>BAT 2:</b> In order to improve the overall environmental performance of the plant, BAT is to use all of the following techniques:</p> <ul style="list-style-type: none"> <li>a) Set up and implement waste characterisation and pre-acceptance procedures</li> <li>b) Set up and implement waste acceptance procedures</li> <li>c) Set up and implement a waste tracking system and inventory</li> <li>d) Set up and implement an output quality management system</li> </ul>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <ul style="list-style-type: none"> <li>a) Procedures for characterisation and pre-acceptance of waste have been set-up and implemented, as described in Section 3.2.</li> <li>b) Procedures for acceptance of waste have been set-up and implemented, as described in Section 3.2.</li> </ul>	✓

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|---|---|
| <ul style="list-style-type: none"> <li>e) Ensure waste segregation</li> <li>f) Ensure waste compatibility prior to mixing or blending of waste</li> <li>g) Sort incoming solid waste</li> </ul> | <ul style="list-style-type: none"> <li>c) An electronic system is used to track wastes and provide a site inventory. This system links all jobs from the initial enquiry, through pre-acceptance and acceptance stages. The system produces a full site inventory showing what waste is present on site and the subsequent transfer offsite.</li> <li>d) The site will regularly monitor the outputs from waste treatment to ensure that this meets the quality standards for the next user or the waste disposal facility accepting the waste. This includes testing of each batch of waste waters discharged from the site and ensuring the compatibility of high calorific wastes being consigned to cemfuel manufacturers.</li> <li>e) Waste is segregated by its properties to facilitate easier storage and treatment. Wastes are physically segregated based on their properties:             <ol style="list-style-type: none"> <li>1. Hazardous wastes is segregated by classification. Waste will be subject to onsite laboratory testing to check for compatibility with other wastes of the same type. Flammable wastes are stored within designated flammable waste storage areas at the site, including quarantine areas. Organic peroxides and oxidisers will be stored securely in the small Warehouse. All other wastes will be segregated and separation distances applied to comply with requirements for Chemical Warehousing, The Storage of Packaged Dangerous Substances.</li> <li>2. Non-hazardous waste is segregated from hazardous waste.</li> <li>3. Liquid waste is segregated from solids wastes</li> </ol> </li> </ul> |
|---|---|

	<p>See the site plan in appendices for details of locations of segregated storage.</p> <p>f) CWR ensures waste compatibility prior to treatment by verifying the composition of wastes using information provided by the previous waste holder that was obtained during pre-acceptance checks and by additional sampling information taken during waste acceptance, as required. MSDS are available for pure chemical wastes. CWR site staff are suitably trained and competent, supported by a technically competent site manager.</p> <p>g) Although these techniques are generally not applicable to the operations of the HWTS, CWR will implement sorting of solid waste by manually sorting solid waste by segregation different waste types based on compatibility testing, as per BAT2 (e).</p>	
<p><b>BAT 3:</b> 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 EMS, that incorporates all of the following features:</p> <ul style="list-style-type: none"> <li>i. Information about the characteristics of the waste to be treated and the waste treatment processes</li> <li>ii. Information about the characteristics of the waste water streams</li> <li>iii. Information about the characteristics of the waste gas streams</li> </ul>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <ul style="list-style-type: none"> <li>i. The site will operate as a Waste Transfer Station where most wastes are not subject to treatments other than to make them easier to store and collect. However, CWR understands the characteristics of the wastes to be stored and treated through information gathered during pre-acceptance to ensure the wastes are suitable for the proposed treatments. Simplified process flow diagrams for different treatment types are available. Waste treatment is supervised by experienced and competent staff who will monitor treatment techniques and outputs to ensure efficacy.</li> </ul>	<input type="checkbox"/>

	<ul style="list-style-type: none"> <li>ii. Characteristics of waste waters will be determined prior to disposal, in agreement with the effluent transfer agreement. Waste waters disposed of are subject to testing and monitoring of average values.</li> <li>iii. Not applicable – there are no waste gas streams associated with the HWTS.</li> </ul>	
<p><b>BAT 4:</b> In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Optimised storage location</li> <li>b) Adequate storage capacity</li> <li>c) Safe storage operation</li> <li>d) Separate area for storage and handling of packaged hazardous waste</li> </ul>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <ul style="list-style-type: none"> <li>a) Storage locations are optimised to store waste away from off-site receptors, including inside of a building (where suitable) and away from the site perimeter. Storage areas and management of waste movements are designed to eliminate handling of wastes other than at acceptance and for dispatch away from the site.</li> <li>b) The design of the site provides adequate storage capacity which is regularly monitored by the site manager to confirm permit limits on storage quantities and residence times are adhered to. The site uses electronic waste tracking to monitor compliance with permit limits. Storage capacities for different wastes are largely defined by the physical constraints of the two warehouse buildings and external storage areas. Site staff are aware of these limits and as per waste acceptance procedures, waste is not accepted if there is not adequate capacity for wastes to be safely received at the site.</li> <li>c) All wastes accepted at the site are subject to a visual inspection by a competent member of staff, trained in waste acceptance procedures. This ensures waste containers are fit for purpose.</li> </ul>	<p>✓</p>

	<p>Containers failing waste acceptance are subject to rejection or placed into the quarantine area until they can be safely repackaged. Site staff use both mechanical and handraulic methods to load and unload wastes. Transfers of oil/water wastes uses site supplied hoses and pumps to avoid misconnections which could result in spillages of waste.</p> <p>Dedicated storage areas are provided for flammable wastes, oxidising and organic peroxide wastes. Other wastes are segregated on the basis of separation distances for The Storage of Packaged Dangerous Substances. Other wastes that are sensitive to environmental conditions are stored within enclosed buildings or enclosed containers or both.</p> <p>d) Separate areas are provided at the site for storage of packaged hazardous wastes including internal and external areas. Different hazardous wastes are stored based on the hazardous waste classification and in accordance with segregation requirements.</p>	
<p><b>BAT 5:</b> 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.</p>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <p>CWR's staff are trained in safe handling and transfer techniques, as per company Working Instruction (procedures). Operations of the HWTS are overseen by a Technically Competent Manager. Depending on the risks presented, different Working Instruction and transfer equipment will be used that is commensurate with the risk. Training records are maintained and updated as required, e.g. when new equipment is purchased.</p>	<p>✓</p>

	<p>Suitable infrastructure and equipment is available to assist staff and prevent spills. The type of infrastructure and equipment will be commensurate with the risk. In the event of a spill that causes significant pollution, CWR will review the incident and issue updated Working Instruction, as required. Spill kits, containing suitable media/equipment are available across the site.</p>	
<p><b>BAT 6:</b> For relevant emissions to water as identified by the inventory of waste water streams, BAT is to monitor key process parameters at key locations.</p>	<p>Key parameters of waste water emissions will be monitored at the point where the emission leaves the installation as required by the conditions of the Environmental Permit and/or in accordance with the conditions of the effluent transfer agreement.</p>	✓
<p><b>BAT 7:</b> 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.</p>	<p>There are no direct emissions to water from the HWTS. Instead emissions to water will be via sewer discharge and a batch process. Monitoring of the discharge will be in accordance with the requirements for treatment of water based liquid wastes per batch for the substances/parameters that are expected to be contained within the effluent based on the wastes accepted and treated at the site.</p>	✓
<p><b>BAT 8:</b> BAT is to monitor channelled emissions to air with at least the frequency 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.</p>	<p>The site will have two emission points associated with the venting of air from the headspace of two waste water storage tanks. There will be no releases from the emission points except for when pumping operations are transferring water out of the tanks. Waste water within these tanks will have been treated and consist of predominantly water. Treatments will have removed volatile compounds with primary treatment methods and the waste will not be associated with emissions of dust. Therefore no emissions monitoring is proposed.</p>	✓

<p><b>BAT 9:</b> BAT is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one of a combination of the techniques given below:</p> <ul style="list-style-type: none"> <li>• Measurement</li> <li>• Emissions factors</li> <li>• Mass balance</li> </ul>	<p>BAT not applicable to the HWTS.</p> <p>The site is not undertaking regeneration of spent solvents, decontaminating equipment containing POPs or physico-chemical treatment of solvents for the recovery of their calorific value.</p>	<p>n/a</p>
<p><b>BAT 10:</b> BAT is to periodically monitor odour emissions. Odour emissions can be monitored using EN standards. When applying alternative methods for which no EN standards are available, ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.</p>	<p>Operations at the site are not expected to cause odour nuisance at sensitive receptors due to the separation distance between the site and the location of the nearest sensitive receptors, which are approx. 3.8 km away.</p> <p>The site is not the source of significant odour but has an odour management plan.</p> <p>Regular olfactory sniff testing at the site perimeter will be conducted by competent CWR staff and records of any odour or the lack of odour are made in the site diary.</p>	<p>✓</p>
<p><b>BAT 11:</b> 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.</p>	<p>CWR conforms with this BAT requirement with continuous improvement an aspect of the ISO 14001 certified EMS.</p> <p>CWR monitors consumption of mains water and grid derived energy regularly. Meter readings allow for usage and trends to be reviewed on an ongoing basis and reported at least annually. Consumption of raw materials is also monitored to ensure process efficiency, although there are limited raw materials used on site e.g. diesel for fork lift trucks and chemical use in neutralisation.</p>	<p>✓</p>

	<p>Generation of waste waters will be monitored in accordance with conditions of the Environmental Permit and the effluent transfer agreement prior to discharge from the site.</p> <p>Generation of residues is monitored although the HWTS will not be the source of large quantities of residues and will divert waste streams away from disposal for recovery and recycling in the first instance.</p>	
<p><b>BAT 12:</b> 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, that includes all of the following elements:</p> <ul style="list-style-type: none"> <li>• A protocol containing actions and timelines</li> <li>• A protocol for conduction odour monitoring</li> <li>• A protocol for response to identified odour incidents</li> <li>• An odour prevention and reduction programme designed to identify the sources</li> </ul>	<p>The site is not the source of significant odour but has an odour management plan to include:</p> <ul style="list-style-type: none"> <li>• A protocol containing actions and timelines</li> <li>• A protocol for conduction odour monitoring</li> <li>• A protocol for response to identified odour incidents</li> <li>• An odour prevention and reduction programme designed to identify the sources</li> </ul> <p>The odour management plan will be subject to regular review and as a result of significant operational changes.</p>	<p>✓</p>
<p><b>BAT 13:</b> 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:</p> <ol style="list-style-type: none"> <li>a) Minimising residence times</li> <li>b) Using chemical treatment</li> <li>c) Optimising aerobic treatment</li> </ol>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <ol style="list-style-type: none"> <li>a) Although the site will not operate open systems for waste treatment, residence times will be minimised and the site operate on a 'first in, first out' principal. All waste will be delivered to the site within suitable, primary packaging (type-approved packaging) and bulk containers (e.g. IBCs).</li> <li>b) Not applicable to the HWTS</li> <li>c) Not applicable to the HWTS</li> </ol>	<p>✓</p>

**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
- b) Selection and use of high-integrity equipment
- c) Corrosion prevention
- d) Containment, collection and treatment of diffuse emissions
- e) Dampening
- f) Maintenance
- g) Cleaning of waste treatment and storage areas
- h) Leak detection and repair programme

Cumbria Waste Recycling conforms with the BAT requirements:

- a) Treatment operations will take place inside of an enclosed site Workshop and site staff will be trained to open waste containers for minimal durations when testing or treating the waste.
- b) All equipment used within transfer operations will be designed and of an appropriate specification to prevent diffuse emissions to air. CWR staff are responsible for checking equipment is in good working order (e.g. seals are present and not degraded) to prevent diffuse emissions.
- c) The design and construction of the site and equipment takes into consideration the materials being stored in order to prevent corrosion. Concrete surfacing is chemically resistant. Tanks and pipework has been procured with the purpose of treating liquid wastes containing oil and specification includes suitable finishes.
- d) The design of the site includes the provision of warehouses for storing, treating and handling of suitable waste types. The use of this building is restricted by safety considerations and flammable wastes will be stored externally. Due to the primary packaging used for most wastes and the nature of the wastes handled, significant diffuse emissions are not expected from the HWTS.
- e) Dampening of traffic areas and road-sweeping will be deployed as required to reduce diffuse dust emissions from vehicle movements. Dampening of waste storage is not anticipated to be suitable and therefore is not applicable.

✓

	<ul style="list-style-type: none"> <li>f) Routine maintenance of equipment used at the HWTS is the responsibility of site staff. They will be supported by approved contractors. All equipment is located above ground and waste containers are portable so that staff can gain access to equipment as required.</li> <li>g) Site staff will undertake routine cleaning and housekeeping of the site. Cleaning and regular maintenance of all plant and equipment will be completed on the time scale specified by the equipment manufacturer. Spillages are cleaned up as required making use of available spill kits.</li> <li>h) The oil/water separation treatment is not expected to be the source of significant VOC emissions as the design of the plant does not introduce additional heat or processing other than gravity settlement. Therefore a leak detection and repair programme is not anticipated to be required.</li> </ul>	
<p><b>BAT 15:</b> BAT is to use flaring only for safety reasons or for non-routine operating conditions by using both of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Correct plant design</li> <li>b) Plant management</li> </ul>	<p>BAT not applicable to the HWTS. The site does not utilise flaring.</p>	<p>n/a</p>
<p><b>BAT 16:</b> In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use both of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Correct design of flaring devices</li> <li>b) Monitoring and recording as part of flare management</li> </ul>	<p>BAT not applicable to the HWTS. The site does not utilise flaring.</p>	<p>n/a</p>
<p><b>BAT 17:</b> 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</p>	<p>According to the Environment Agency Noise Advisory Tool, a Noise Impact Assessment and Noise Management Plan are not required.</p>	<p>n/a</p>

<p>vibration management plan, as part of the environmental management system, that includes all of the following elements:</p> <ul style="list-style-type: none"> <li>a) A protocol containing appropriate actions and timelines</li> <li>b) A protocol for conduction noise and vibration monitoring</li> <li>c) A protocol for response to identified noise and vibration events e.g. complaints</li> <li>d) A noise and vibration programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.</li> </ul>	<p>Operations at the site are not expected to cause noise and vibration nuisance at sensitive receptors. due to the separation distance between the site and the location of the nearest sensitive receptors, which are approx. 3.8 km away.</p>	
<p><b>BAT 18:</b> 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:</p> <ul style="list-style-type: none"> <li>a) Appropriate location of equipment and buildings</li> <li>b) Operational measures</li> <li>c) Low-noise equipment</li> <li>d) Noise and vibration control equipment</li> <li>e) Noise attenuation</li> </ul>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <ul style="list-style-type: none"> <li>a) The HWTS is an existing site which restricts opportunities for relocating exits and entrances. There is a significant distance between the site and sensitive receptors, and multiple sources of noise located between the site and the receptors including other industrial sites and major transport sources.</li> <li>b) Operational measures will be applied that prevents and reduces emissions of noise and vibrations: <ul style="list-style-type: none"> <li>i. Daily vehicle and equipment checks are completed by CWR staff on site equipment. Maintenance is completed as per manufacturers recommendations;</li> <li>ii. Waste storage activities will be undertaken within enclosed buildings where possible and doors/windows closed when possible. Waste treatment will take place inside of the enclosed site Workshop to minimise emissions of noise;</li> <li>iii. CWR staff are fully trained for their roles and competent; training records are maintained.</li> </ul> </li> </ul>	<p>✓</p>

	<p>The site is managed by the Transfer Station Manager and there is a WAMITAB qualified Technically Competent Manager;</p> <ul style="list-style-type: none"> <li>iv. Noisy activities are not normally undertaken during night time hours to prevent significant impacts and emissions. In the event of critical maintenance that has to take place during night time hours, these will be planned for less disruptive night time hours (e.g. 9-10pm).</li> <li>v. Noise controls are used as required during site activities including but not limited to enclosing activities inside of a building, using low-noise techniques and acoustic shields.</li> </ul> <ul style="list-style-type: none"> <li>c) The site will make use of low-noise equipment e.g. pumps. Equipment will be operated as required with anti-idling procedures in place to prevent noise from machinery.</li> <li>d) The site will use noise and vibration controls to prevent and minimise noise including operating noisy equipment inside of buildings.</li> <li>e) Noise attenuation is provided by the presence of buildings and structures on the site which reduces propagation of noise.</li> </ul>	
<p><b>BAT 19:</b> 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.</p> <ul style="list-style-type: none"> <li>a) Water management</li> <li>b) Water recirculation</li> <li>c) Impermeable surface</li> <li>d) Techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels</li> </ul>	<p>Cumbria Waste Recycling conforms with the BAT requirements:</p> <ul style="list-style-type: none"> <li>a) The site will optimise use of washing water and re-circulate water used within cleaning operations where possible. Surface cleaning and dry cleaning will be prioritised.</li> <li>b) The site will re-circulate water used within cleaning operations where possible.</li> </ul>	<p>✓</p>

<ul style="list-style-type: none"> <li>e) Roofing of water storage and treatment areas</li> <li>f) Segregation of water streams</li> <li>g) Adequate drainage infrastructure</li> <li>h) Design and maintenance provisions to allow detection and repair of leaks</li> <li>i) Appropriate buffer storage capacity</li> </ul>	<ul style="list-style-type: none"> <li>c) Waste is stored on impermeable surfacing across the site. Waste treatment takes place on impermeable surfacing.</li> <li>d) The tanks used for storage of waste waters are fitted with high-level alarms to minimise spillages and overfilling. Tanks are located within a bunded area that would provide secondary containment for any spillage event.</li> <li>e) The site utilises roofing of waste storage and waste treatment areas.</li> <li>f) Process waters are stored inside of suitable waste containers and segregated from surface water run-off. Depending on the location, surface water run-off is isolated to prevent cross-contamination of water streams (e.g. flammable waste area is separate from yard storage for other wastes). As required, waste water streams are subject to testing and different treatment routes to minimise the waste water streams that require treatment.</li> <li>g) The whole of the site is connected to an enclosed drainage system and there are no direct discharges to surface or ground waters from areas of the site used to store or treat wastes.</li> <li>h) The site has a planned and preventative maintenance programme in order to monitor for leaks. Pumping operations are largely manual processes which would allow operators to spot leaks to the environmental promptly.</li> </ul>	
<p><b>BAT 20:</b> In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of the techniques given below:</p>	<p>The design of the site is to treat suitable waste waters that have been accepted as wastes. Depending upon the nature and properties of the waste, CWR will use appropriate techniques to reduce emissions to water. These include:</p>	<p>✓</p>

<ul style="list-style-type: none"> <li>• Equalisation</li> <li>• Adsorption</li> <li>• Precipitation</li> <li>• Chemical reduction</li> <li>• Ion exchange</li> <li>• Activated sludge process</li> <li>• Sedimentation</li> <li>• Filtration</li> <li>• Nitrification/denitrification when the treatment includes a biological treatment</li> <li>• Neutralisation</li> <li>• Distillation/rectification</li> <li>• Chemical oxidation</li> <li>• Evaporation</li> <li>• Stripping</li> <li>• Coagulation and flocculation</li> <li>• Membrane bioreactor</li> <li>• Flotation</li> <li>• Physical separation</li> </ul>	<ul style="list-style-type: none"> <li>• The site treats combinations of oil/water via gravity separation to separate solid, water and oil fractions.</li> <li>• The site will also treat chemical wastes via neutralisation using pH adjustment to a neutral level. Fully trained and competent staff will blend different wastes to achieve a neutral level of pH or add suitable chemicals to increase or decrease the pH.</li> <li>• Residual waste waters are sampled and tested prior to disposal to a licensed waste water treatment works which will utilise a combination of physical separation, activated sludge processes and filtration.</li> <li>• Emissions of waste waters to sewer will be monitored in accordance with the requirements of the effluent transfer agreement and relevant BAT-AELs. The frequency of monitoring may be reduced where batch discharges take place less than the minimum monitoring frequency and where substances are not present within the waste waters.</li> <li>• A SWPRA has been conducted in line with EA Guidance, which determined that discharges in accordance with BAT-AELs would not cause an exceedance of the associated EQS values.</li> </ul>	
<p><b>BAT 21:</b> 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:</p> <ol style="list-style-type: none"> <li>a) Protection measures</li> <li>b) Management of incidental/accidental emissions</li> <li>c) Incidental/accident registration and assessment system</li> </ol>	<p>Cumbria Waste Recycling conforms with the BAT requirements, and the site has an accident management plan.</p> <ol style="list-style-type: none"> <li>a) The Accident Management Plan includes requirements for physical protection measures at the site to protect plant from unauthorised access leading to malevolent acts and the site is secured by a perimeter fence. The site has a fire protection</li> </ol>	<p>✓</p>

	<p>system including smoke detectors and provision of fire extinguishers. High risk activities will be undertaken in dedicated areas that are free of combustible materials in order to prevent fire incidents from occurring. Site staff are trained in emergency procedures and the locations of emergency equipment and emergency services access is included within the site infrastructure plan(s). The site fire alarm is automatically monitored out of hours.</p> <p>b) The design of the site includes suitable containment for managing emissions caused by accidents. Site staff are trained in managing spills and leaks using appropriate containment media from the spill kits located on site. Larger spillages or fire-fighting water is contained by the site drainage system. The site includes suitable secondary containment infrastructure but consists of a large impermeable area with kerbing which could contain larger spillages or large volumes of firefighting water. The drainage system is also sealed to prevent discharge to the environment with only one emission point (to sewer).</p> <p>c) In the event of an accident or incident, the accident management plan includes a reporting and communication section and there is a company policy for managing notifications to the regulator. As required, an accident review is carried out following an accident or incident and corrective actions put in place to prevent re-occurrences.</p>	
<p><b>BAT 22:</b> In order to use materials efficiently, BAT is to substitute materials with waste.</p>	<p>Cumbria Waste Recycling conforms with the BAT requirements although the operations of the site will not</p>	<p>✓</p>

	<p>consume great quantities of waste materials as operations will largely be transfers of packaged wastes.</p> <p>Where compatible wastes are available and site staff have assessed their suitability for use, the operation of the site will utilise waste alkalis and waste acids for pH adjustment in neutralisation activities.</p>	
<p><b>BAT 23:</b> In order to use energy efficiently, BAT is to use both of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Energy efficiency plan</li> <li>b) Energy balance record</li> </ul>	<p>Cumbria Waste Recycling implements measures to use energy efficiently at the HWTS:</p> <ul style="list-style-type: none"> <li>a) The site will monitor energy consumption on a regular basis and review the usage and trends on an annual basis. Data will be used to inform purchasing decisions and identify potential savings across all activities at the site. The company will monitor the energy consumption as the site grows and manages more waste in order to identify trends and identify potential areas for improvement.</li> <li>b) The site will record energy consumption from all sources based in handling and treating wastes. The site will not export energy from the installation.</li> </ul>	<p>✓</p>
<p><b>BAT 24:</b> 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.</p>	<p>Cumbria Waste Recycling conforms with these BAT requirements and will implement a residues management plan. However, the site does not generate significant quantities of wastes.</p> <p>The primary function of the waste transfer station is to ensure the proper disposal of wastes and residues that are managed by CWR on behalf of its clients by diverting wastes to the most sustainable recycling, recovery or disposal facility.</p> <p>Most wastes accepted by the HWTS are accepted for transfer within existing packaging. Where wastes are</p>	<p>✓</p>

	<p>removed from primary packaging for waste treatment on site, packaging will be re-used depending on compatibility between the substances contained. Where re-use activities present a cross-contamination risk, packaging will be disposed of in accordance with the waste hierarchy so as to minimise the generation and disposal of residues.</p>	
<p><b>BAT conclusions for the mechanical treatment of waste</b></p>		
<p><b>BAT 25:</b> In order to reduce emissions to air of dust and particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT is to apply Water injecting shredder as well as one or a combination of:</p> <ul style="list-style-type: none"> <li>a) Cyclone</li> <li>b) Fabric filter</li> <li>c) Wet scrubbing</li> <li>d) Water injection into the shredder</li> </ul> <p>The associated BAT-AELs for channelled dust emissions to air from the mechanical treatment of waste is 2-5 mg/Nm<sup>3</sup>.</p>	<p>BAT not applicable to the HWTS. The site does not mechanically treat wastes.</p>	<p>n/a</p>
<p><b>BAT conclusions for the mechanical treatment in shredders of metal waste</b></p>		
<p><b>BAT 26:</b> In order to improve the overall environmental performance, and to prevent emissions due to accidents and incidents, BAT is to clean waste treatment and storage areas, and all of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Implementation of a detailed inspection procedure for baled waste before shredding</li> <li>b) Removal of dangerous items from the waste input stream and their safe disposal</li> <li>c) Treatment of containers only when accompanied by a declaration of cleanliness</li> </ul>	<p>BAT not applicable to the HWTS. The site does not mechanically treat metal wastes in shredders.</p>	<p>n/a</p>

<p><b>BAT 27:</b> In order to prevent deflagrations to reduce emissions when deflagrations occur, BAT is to use a deflagration management plan in combination with one or both of the techniques below:</p> <ul style="list-style-type: none"> <li>a) Deflagration management plan</li> <li>b) Pressure relief dampers</li> <li>c) Pre-shredding</li> </ul>	<p>BAT not applicable to the HWTS.</p> <p>The site does not mechanically treat metal wastes in shredders.</p>	<p>n/a</p>
<p><b>BAT 28:</b> In order to use energy efficiently, BAT is to keep shredder feed stable.</p>	<p>BAT not applicable to the HWTS.</p> <p>The site does not mechanically treat metal wastes in shredders.</p>	<p>n/a</p>
<p><b>BAT conclusions for the treatment of WEEE containing VFCs and/or VHCs</b></p>		
<p><b>BAT 29:</b> in order to prevent or, where that is not practicable, to reduce emissions of organic compounds to air, BAT is to apply</p> <ul style="list-style-type: none"> <li>a) Optimised removal and capture of refrigerants and oils</li> </ul> <p>And one or both of the following:</p> <ul style="list-style-type: none"> <li>b) Cryogenic condensation</li> <li>c) Adsorption</li> </ul>	<p>BAT not applicable to the HWTS.</p> <p>The site does not treat WEEE.</p>	<p>n/a</p>
<p><b>BAT 30:</b> In order to prevent emissions due to explosions when treating WEEE containing VFCs and/or WHCs, BAT is to use either of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Inert atmosphere</li> <li>b) Forced ventilation</li> </ul>	<p>BAT not applicable to the HWTS.</p> <p>The site does not treat WEEE.</p>	<p>n/a</p>
<p><b>BAT conclusions for the mechanical treatment of waste with calorific value</b></p>		

<p><b>BAT 31:</b> In order to reduce emissions to air of organic compounds, BAT is to apply and use containment, collection and treatment of diffuse emissions and one or a combination of the following techniques:</p> <ul style="list-style-type: none"> <li>a) Adsorption</li> <li>b) Biofilter</li> <li>c) Thermal oxidation</li> <li>d) Wet scrubbing</li> </ul>	<p>BAT not applicable to the HWTS.</p> <p>The site does not mechanically treat wastes with calorific value.</p>	<p>n/a</p>
<p><b>BAT conclusions for the mechanical treatment of WEEE containing mercury</b></p>		
<p><b>BAT 32:</b> In order to reduce mercury emissions to air, BAT is to collect mercury emissions at source to send them to abatement and to carry out adequate monitoring. BAT associate emission level (BAT-AEL) for channelled mercury emissions to air from the mechanical treatment of WEEE containing mercury is 2-7 µg/Nm<sup>3</sup> averaged over the sampling period.</p>	<p>BAT not applicable to the HWTS.</p> <p>The site does not treat WEEE containing mercury.</p>	<p>n/a</p>
<p><b>BAT conclusions for the biological treatment of waste</b></p> <p><b>BAT conclusions no 33 – 39 are not relevant to the site as the site does not undertake any biological treatment of waste</b></p>		
<p><b>BAT conclusions for the physico-chemical treatment of solid and/or pasty waste</b></p>		
<p><b>BAT 40:</b> In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures.</p>	<p>As per BAT 2 Cumbria Waste Recycling has procedures for characterisation, pre-acceptance and acceptance of waste. These allow waste inputs to be monitored, with laboratory analysis as required. These procedures check the wastes are suitable for treatment at the site. Site staff are suitably trained and competent to monitor activities undertaken and there are Working Instructions in place to carry out different treatment activities.</p>	<p>✓</p>

<p><b>BAT 41:</b> In order to reduce emissions of dust, organic compounds and NH<sub>3</sub> to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Adsorption</li> <li>b) Biofilter</li> <li>c) Fabric filter</li> <li>d) Wet scrubbing</li> </ul> <p>The BAT-associated emission level (BAT-AEL) for channelled emissions of dust to air from the physico-chemical treatment of solid and/or pasty waste is 2-5 mg/Nm<sup>3</sup> averaged over the sampling period.</p>	<p>The requirements of BAT41 are not generally applicable to the Seal Sands HWTS as there are no point source emissions/channelled to air from physical treatment of solid and/or pasty waste .</p> <p>Waste water storage tanks are fitted with small carbon filter in the roof of the tank in order to vent the headspace to atmosphere during pumping operations of waste waters. The vent filter will use a replaceable activated carbon and natural minerals cartridge to adsorb components from the headspace air as it passes to atmosphere. Emissions could include organic compounds and odour but will be present in very small quantities. Dust is not expected to be emitted from these liquid wastes.</p> <p>The design of the site includes the provision of warehouses for storing, treating and handling of suitable waste types to prevent diffuse emissions to air.</p> <p>Two point source emissions to air which use adsorption filters will abate potential organic compounds from headspace air in waste water storage tanks that are not associated with emissions of dust.</p>	<p>✓</p>
<p><b>BAT conclusions for the re-refining of waste oil</b></p>		
<p><b>BAT 42:</b> In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures.</p>	<p>BAT not applicable as the site does not undertake activities to re-refine waste oils.</p>	<p>n/a</p>
<p><b>BAT 43:</b> In order to reduce the quantity of waste sent for disposal, BAT is to use one or both of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Material recovery</li> <li>b) Energy recovery</li> </ul>	<p>BAT not applicable as the site does not undertake activities to re-refine waste oils.</p>	<p>n/a</p>

<p><b>BAT 44:</b> In order to reduce emissions of organic compounds to air, BAT is to apply containment, collection and treatment of diffuse emissions in combination with one or a combination of the following techniques:</p> <ul style="list-style-type: none"> <li>a) Adsorption</li> <li>b) Thermal oxidation</li> <li>c) Wet scrubbing</li> </ul>	<p>BAT not applicable as the site does not undertake activities to re-refine waste oils.</p>	<p>n/a</p>
<p><b>BAT conclusions for the physico-chemical treatment of waste with calorific value</b></p>		
<p><b>BAT 45:</b> In order to reduce the emissions of organic compounds to air, BAT is to apply containment, collection and treatment of diffuse emissions in combination with one or a combination of the following techniques:</p> <ul style="list-style-type: none"> <li>a) Adsorption</li> <li>b) Cryogenic condensation</li> <li>c) Thermal oxidation</li> <li>d) Wet scrubbing</li> </ul>	<p>The site will treat diffuse emissions to air that are generated by pumping activities when preparing a consignment of waste for dispatch to the cemfuel manufacturer in a bulk tanker vehicle. Airspace from tankers and drums will be pumped out and pass through a caustic material in order to contain any potential odours to prevent emissions to atmosphere. The tanker vent will be put through a basic scrubber via a small hose connected to an IBC containing water or 15% sodium hydroxide, as confirmed by the site chemist.</p>	<p>✓</p>
<p><b>BAT conclusions for the regeneration of spent solvents</b></p>		
<p><b>BAT 46:</b> In order to improve the overall environmental performance of the regeneration of spent solvents, BAT is to use one or both of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Material recovery</li> <li>b) Energy recovery</li> </ul>	<p>BAT not applicable as the site does not undertake activities to regenerate spent solvents.</p>	<p>n/a</p>
<p><b>BAT 47:</b> In order to reduce emissions of organic compounds to air, BAT is to apply containment, collection and treatment of diffuse emissions in combination with one or a combination of the following techniques:</p>	<p>BAT not applicable as the site does not undertake activities to regenerate spent solvents.</p>	<p>n/a</p>

<ul style="list-style-type: none"> <li>a) Recirculation of process off-gases in a steam boiler</li> <li>b) Adsorption</li> <li>c) Thermal oxidation</li> <li>d) Condensation or cryogenic condensation</li> <li>e) Wet scrubbing</li> </ul>		
<b>BAT conclusions for the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil</b>		
<p><b>BAT 48:</b> In order to improve the overall environmental performance of the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil, BAT is to use all of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Heat recovery from the furnace off-gas</li> <li>b) Indirectly fired furnace</li> <li>c) Process-integrated techniques to reduce emissions to air</li> </ul>	BAT not applicable as the site does not undertake these activities.	n/a
<p><b>BAT 49:</b> In order to reduce emissions of HCl, HF, dust and organic compounds to air, BAT is to apply containment, collection and treatment of diffuse emissions in combination with one or a combination of the following techniques:</p> <ul style="list-style-type: none"> <li>a) Cyclone</li> <li>b) Electrostatic precipitator</li> <li>c) Fabric filter</li> <li>d) Wet scrubbing</li> <li>e) Adsorption</li> <li>f) Condensation</li> <li>g) Thermal oxidation</li> </ul>	BAT not applicable as the site does not undertake these activities.	n/a
<b>BAT conclusions for the water washing of excavated contaminated soil</b>		
<p><b>BAT 50:</b> In order to reduce emissions of dust and organic compounds to air from the storage, handling and washing steps, BAT is to apply containment, collection</p>	BAT not applicable as the site does not undertake water washing of excavated contaminated soil.	n/a

<p>and treatment of diffuse emissions in combination with one or a combination of the following techniques:</p> <ul style="list-style-type: none"> <li>a) Adsorption</li> <li>b) Fabric filter</li> <li>c) Wet scrubbing</li> </ul>		
<p><b>BAT conclusions for the decontamination of equipment containing PCBs</b></p>		
<p><b>BAT 51:</b> In order to improve the overall environmental performance and to reduce channelled emissions of PCBs and organic compounds to air, BAT is to use all of the techniques given below:</p> <ul style="list-style-type: none"> <li>a) Coating of the storage and treatment areas</li> <li>b) Implementation of staff access rules to prevent dispersion of containment</li> <li>c) Optimised equipment cleaning and drainage</li> <li>d) Control and monitoring of emissions to air</li> <li>e) Disposal of waste treatment residues</li> <li>f) Recovery of solvent when washing is used</li> </ul>	<p>BAT not applicable as the site does not decontamination of equipment containing PCBs.</p>	<p>n/a</p>
<p><b>BAT conclusions for the treatment of water-based liquid waste</b></p>		
<p><b>BAT 52:</b> In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures.</p>	<p>As per BAT 2 Cumbria Waste Recycling has procedures for characterisation, pre-acceptance and acceptance of waste. These allow waste inputs to be monitored, with laboratory analysis as required. These procedures check the wastes are suitable for treatment at the site. Site staff are suitably trained and competent to monitor activities undertaken and there are Working Instructions in place to carry out different treatment activities.</p>	<p>✓</p>
<p><b>BAT 53:</b> In order to reduce the emissions of HCl, NH<sub>3</sub> and organic compounds to air, BAT is to apply containment, collection and treatment of diffuse emissions in combination with one or a combination of the following techniques:</p>	<p>Waste water storage tanks are fitted with small carbon filter in the roof of the tank in order to vent the headspace to atmosphere during pumping operations of waste waters The</p>	<p>✓</p>



- a) Adsorption
- b) Biofilter
- c) Thermal oxidation
- d) Wet scrubbing

The BAT-associated emission levels (BAT-AELs) for channelled emissions of HCl and TVOC to air from the treatment of water-based liquid waste are 1-5 mg/Nm<sup>3</sup> and 3-20 mg/Nm<sup>3</sup> averaged over the sampling period.

vent filter will use a replaceable activated carbon and natural minerals cartridge to adsorb organic components from the headspace air as it passes to atmosphere.

## 8 APPENDICES

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1. Environment Agency Forms: A, B2, B3, B4, B6, F1
2. Site Plans
  - a. Site Location Plan (Figure 1)
  - b. Site Layout and Emission Points Plan (Figure 2)
  - c. Permeable and Impermeable Surfaces Plan (Figure 3)
  - d. Site Drainage Plan (Figure 4)
  - e. Process Flow Diagrams (Figure 5)
3. WI114: Waste Pre-acceptance procedure
4. WI112: Waste acceptance procedure
5. Site Condition Report and Relevant Hazardous Substances Assessment
6. Accident Management Plan
7. Dust/Fugitive Emissions Management Plan
8. Fire Prevention Plan
9. Odour Management Plan
10. Surface Water Pollution Risk Assessment
11. Environment Agency Enhanced Pre-application advice letter
12. WAMITAB Certificates
13. EMS Certificate



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