# HARCOURT FIBER RECYCLING FACILITY

## Operating Techniques and Management System

## Environmental Permit Application

Prepared for: OSO Fiber UK Ltd

Environmental Permit Ref: EPR/KB3307LA/A001

SLR Ref: 416.11821.00001
Version No: Final v1
September 2021

# BASIS OF REPORT

This document has been prepared by SLR Consulting Limited with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with OSO Fiber UK Ltd (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

# CONTENTS

# DOCUMENT REFERENCES

## TABLES



## DRAWINGS

Drawing 001 Site Location Plan
Drawing 002 Environmental Permit Boundary
Drawing 003 Environmental Site Setting
Drawing 004 Detailed Site Layout, Fire Prevention and Management Plan

# 1.0 Introduction

OSO Fiber UK Ltd (OSO Fiber) has retained SLR Consulting Limited (SLR) to prepare an Environmental Permit (EP) Application for the Harcourt Fiber Recycling Facility located in Telford under the Environmental Permitting (England and Wales) Regulations 2016, hereafter referred to as 'the Site'.

This Operating Techniques and Management System (OT) document sets out best practice for operating the Site, based on legislation and best available techniques in the industry.

This OT document will be reviewed and updated on an annual basis or as a result of any of the following activities:

- The issue of an EP variation by the Environment Agency (EA);
- Finalisation of site construction;
- A material change to the operational process;
- A substantiated complaint; or
- Any changes in legislation or guidance documents applicable to the Harcourt Fiber Recycling Facility.

This OT document is supplemented by the following documents submitted in the EP application of 2021:

- Non-Technical Summary (NTS);
- Environmental Risk Assessment (ERA);
- Site Condition Report (SCR);
- Fire Prevention Plan (FPP);
- Dust and Emissions Management Plan (DEMP); and
- Associated Drawings including; Site Location Plan, Environmental Permit Boundary, Environmental Site Setting and Detailed Site Layout, Fire and Management and Prevention.

## 1.1 Report Structure

This report describes the operating techniques and management system that will be implemented at the facility to ensure compliance with the conditions of the EP, guidance and legislation. The report is divided into the following sections:

- Section 1 Introduction
- Section 2 General management appropriate measures
- Section 3 Operations
- Section 4 Waste pre-acceptance, acceptance and tracking
- Section 5 Waste Storage
- Section 6 Waste Treatment
- Section 7 Emissions control
- Section 8 Emissions monitoring and limits
- Section 9 Waste minimisation, recovery and disposal
- Section 10 Information

The report is written in accordance with EA guidance: *'Non-hazardous and inert waste: appropriate measures for permitted facilities, July 2021'.*

## 1.2 Site Location

The site is centred on National Grid Reference SJ 71143 04637 on Halesfield 15, Telford, TF7 4LE and lies approximately 3km east of Ironbridge and 5km southeast of Telford. The site is accessed via Halesfield 15 Road, which leads to the A442 south west of the site.

The site is located in the Halesfield Industrial Estate and is surrounded on all sides by commercial/industrial premises, deciduous woodland and small areas of open ground. Residential areas located within Telford are located to the west of the site.

The site location is illustrated on Drawing 001. The site boundary is shown on Drawing 002, and the local receptors and cultural and natural heritage receptors are illustrated on Drawing 003.

## 1.3 Document Revision History

Any changes to the Operating Techniques and Management System shall be labelled in chronological order and the date of the change recorded. All records of the changes shall be listed in the revision history table below:

| Version | Reason for Revision | Date of Revision | Signature of Site Manager |
|---|---|---|---|
| 1.0 | First Version of Document Finalised and Released | *[Insert date of approval by the EA]* | |
| | | | |
| | | | |
| | | | |
| | | | |

# 2.0 General Management Appropriate Measures

## 2.1 Management System

This management system operated by OSO Fiber will ensure that:

- The risks that the activities pose to the environment are identified;
- The measures that are required to minimise the risks are identified;
- The activities are managed in accordance with this management system;
- Performance against this management system is audited at regular intervals; and
- The EP is complied with.

### 2.1.1 Management Structure and Responsibilities

The Site Manager will be responsible for day to day operations and compliance with the EP.

Whenever the site is open to receive wastes, or will carry out any of the waste management operations, it will be supervised by at least one member of staff who is suitably trained and fully conversant with the requirements of the permit regarding:

- Waste acceptance and control procedures;
- Operational controls;
- Maintenance;
- Record-keeping;
- Emergency action plans; and
- Notifications to the EA.

## 2.2 Technical Competence and Training

The site will be managed by sufficient staff, competent to operate the site. This management system will ensure the following:

- All staff will have clearly defined roles and responsibilities;
- Records will be maintained of the skills required for each post;
- Records will be maintained of the training and relevant qualifications undertaken by staff to meet the requirement of each post; and
- Operations will be governed by standard operating instructions.

Operations at the site will be under the overall control of a technically competent person who holds the relevant Certificate of Technical Competence (COTC) under the Waste Management Industry Training and Advisory Board (WAMITAB) scheme.

An assessment of staff training needs will be carried out to identify the posts for which specific environmental awareness training is needed, and to determine the scope and level of such training. The assessment of training needs will be reviewed on an annual basis.

The training programme will ensure that relevant staff are aware of the following:

- Regulatory implications of the permit for the site and their specific work activity;

- All potential environmental effects from operations under normal and abnormal circumstances;
- The need to report deviations from the EP; and
- Prevention of accidental emissions and the action to be taken should accidental emissions occur.

## 2.3 Site Security

The site will benefit from security fencing around the perimeter of the site and a lockable gate at the site entrance.

CCTV will be provided across the site in addition to security lighting.

The site will be inspected at the commencement of each working day. Any defects or damage which compromises the integrity of the enclosure will be made secure by temporary repair by the end of the working day. Permanent repairs will be affected as soon as practicable.

All inspections, any defects, damage or repairs will be recorded in the site diary.

## 2.4 Display of Environmental Permit

A copy of the EP will be kept available for reference by all staff and contractors whose work may impact the environment.

## 2.5 Managing Documentation and Records

Controls will be in place to ensure that all documents are issued, revised and maintained in a consistent fashion. Documents included in the scope of controls are as follows:

- Policies;
- Responsibilities;
- Targets;
- Procedures;
- Monitoring records;
- Maintenance records;
- Results of audits;
- Results of reviews;
- Complaints and incident records; and
- Training records.

Records will be made and kept up to date on a daily basis to reflect deliveries, on-site treatment and dispatches. All records relating to waste acceptance will be maintained and kept readily available on site and kept for a minimum of 2 years.

## 2.6 Reporting Non-Compliance and Taking Corrective Action

Non-compliances detected on site will be reported, investigated and rectified. Staff will maintain awareness of non-compliances in the following areas:

- Actual or potential non-compliance with conditions of the EP;
- System failure discovered at internal audit;

- Suppliers or subcontractors breaking the agreed operating rules;
- Incidents, accidents, and emergencies;
- Malfunction, breakdown or failure of plant;
- Other operational system failure; and
- Complaints.

The action taken in response to the non-conformance may include:

- Obtaining additional information on the nature and extent of the non-conformance;
- Discussing and testing alternative solutions;
- Modifying procedures and responsibilities;
- Seeking approval for additional resources and training; and
- Contacting suppliers and contractors (as applicable).

## 2.7 Auditing and Legal Compliance

There will be a formalised internal auditing procedure to ensure the facility is audited at defined intervals and that the progress of corrective and preventative action is monitored.

## 2.8 Monitoring, Measuring and Reviewing Environmental Performance

A formalised management structure will review environmental performance, and ensure any necessary actions are taken.

## 2.9 Operational Control, Preventative Maintenance and Calibration

The management system contains operational procedures that will ensure effective control of site operations, the use of approved suppliers and contract services, the maintenance of operational equipment and the calibration of monitoring equipment.

All plant and equipment will be subject to a programme of planned preventative maintenance which will follow the inspection and maintenance schedule recommended by the manufacturer.

## 2.10 Design and Construction Quality Assurance

All relevant elements of the site (not already constructed) will be designed in accordance with recognised standards, methodologies and practices.

The design process will use a risk-based approach and will be appropriately documented using drawings, specifications and method statements to provide an adequate audit trail.

Construction Quality Assurance (CQA) plans will govern all construction activities necessary in the future. These CQA plans will be prepared by competent and suitably qualified persons.

A competent and suitably qualified person will supervise the construction activities.

## 2.11 Accident Management Plan

OSO Fiber recognises the importance of the prevention of accidents that may have environmental consequences and that it is crucial to limit those consequences.

An accident management plan will be implemented and maintained at the site to ensure the site and site staff are fully prepared for any such incidents. The accident management plan will be reviewed at least every four years or as soon as practicable after an incident, with changes made accordingly to minimise the risk of occurrence.

The Operations Director and Departmental Managers will be responsible for managing accidents on site and ensuring the plan is understood by all site operatives.

Up to date records of all accidents, incidents, near misses, changes to procedures, abnormal events and findings of maintenance inspections will be kept within the site diary.

The EA will be notified upon detection of any of the events detailed in Section 10.1.5.

The following accident management plan describes the techniques that will be implemented to minimise the risks posed to the environment. Activities affecting the health and safety (H&S) of operatives, contractors and visitors will be separately managed in compliance with H&S regulation and company H&S Policy.

### 2.11.1 Hazard Identification

The following hazards are identified in the ERA that was submitted in support of this EP application (reference 416.11821.00001/ERA):

- Unauthorised waste;
- Fire;
- Loss of containment - spillage and leakage;
- Security and vandalism; and
- Flooding.

The following sections summarise the measures necessary to minimise the potential causes and consequences of accidents, as detailed in the ERA.

#### Unauthorised Waste

The acceptance of unauthorised materials could result in unacceptable wastes being stored and treated at the Site. All wastes will be subject to inspection and checking against the agreed quality specification. In the event that unauthorised waste is delivered to the Site, the waste will be segregated and stored in a designated quarantine/isolation area prior to export from Site.

#### Fire

The site will operate under an agreed FPP, a copy of which will be available on Site.

The plan follows EA guidance for FPPs[1] and details the required mitigation and management methods to prevent a fire of combustible materials stored on Site. The information contained within the FPP aims to meet the 3 main objectives of the EA's FPP Guidance:

- Minimise the likelihood of a fire happening;
- Aim for a fire to be extinguished within 4 hours; and
- Minimise the spread of fire within the site and to neighbouring sites.

[1] Fire Prevention Plans: Environmental Permits, January 2021.

## Loss of Containment

Loss of containment could lead to spillage and leakage of potentially contaminating liquids. To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented:

- Containment system: any facilities for the storage of oils, fuels or chemicals will be sited above ground on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound will be at least the equivalent to the capacity of the tank plus 10%. All filling points, vents and gauges will be located within the bund.
- Storage vessels: storage tanks will be constructed to the appropriate British Standard;
- Inspection: tanks will be inspected visually on a daily basis by the site staff to ensure the continued integrity of the tanks, and identify the requirement for any remedial action;
- Spill kits: materials suitable for absorbing and containing minor spillages will be maintained on site; and
- Monitoring techniques: the site staff will undertake daily monitoring for evidence of spillage and leakage.

In the event of any potentially polluting leak or spillage occurring on site, the following action will be taken:

- Minor spillages will be cleaned up immediately, using sand or proprietary absorbent. The resultant materials will be placed into containers and will then be removed from site and disposed of at a suitably permitted facility. The incident will be logged in the site diary.
- Any dry wastes spilled on site will be collected and transported to the appropriate area of the site.
- In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from flowing outside the EP boundary. The spillage will be cleared immediately and placed in containers for offsite disposal, and the EA will be informed.

## Security and Vandalism

The following security measures are in place:

- Site perimeter: the site benefits from fencing around the perimeter;
- Security doors: the doors to the buildings will be locked at all times when the facility is unattended;
- Lockable gates: the site benefits from gates at the site entrance which will be locked outside of operational hours;
- CCTV: CCTV cameras cover the full extent of the Site;
- Security lighting: the site benefits from security lighting around the site;
- Inspection: gates and fencing extending around the site will be inspected regularly by the operations staff to identify deterioration and damage, and the need for any repairs;
- Maintenance and repair: fencing and gates will be maintained and repaired to ensure their continued integrity. In the event that damage is sustained repairs will be made by the end of the working day. If this is not possible, suitable measures will be taken to prevent any unauthorised access to the site and permanent repairs will be affected as soon as practicable;
- Authorised access system: all visitors to the site will be required to register in the visitor's book and sign out again on exit to minimise the risk of unauthorised visitors being present on Site; and
- Monitoring techniques: operational procedures, including regular inspections will ensure continual monitoring of security provision at the Site.

In the event of a breach of security at the Site, the cause will be investigated, and appropriate mitigation measures implemented. Records to be maintained include inspections and maintenance of security fencing and gates, breaches of security, investigations and actions taken.

### Flooding

There are no surface water features within the site boundary.

The site lies within a flood zone 1 and therefore has a low probability of flooding.
In the event that an accident occurs, or additional risks are identified, the Site Manager will be responsible for carrying out an investigation to determine the cause and implementing remedial action prior to logging this in the site diary.

## 2.12 Contingency Plans and Procedures

The site will implement a contingency plan to ensure that the following are achieved:

- Compliance with all permit conditions and operating procedures during maintenance or shutdown at the site, including disruption at other facilities that would affect supplies to the site or the removal of waste from it;
- No exceedance of limits in the permit and that appropriate measures for storing and handling waste are continued to be applied; and
- Cessation of waste acceptance unless there is a clearly defined method of recovery and enough permitted capacity on site.

The key aspects of the contingency plan are as follows:

- The removal of waste from the site will be managed by a third-party customer that OSO Fiber are in daily contact with. The customer will continually monitor the supply chain and immediately inform OSO Fiber of any potential shutdowns that could impact their ability to remove waste from the site;
- OSO Fiber will inform the customer if the site's capacity is approaching the permitted limits and the customer will arrange for waste to be collected and temporarily stored at one of their previously identified temporary storage sites;
- The known or predictable malfunctions, and the procedures, spare parts, tools and expertise needed to deal with them, will be known for all plant and equipment on site. A 24/7 technical support service will be in place from OSO Fiber's engineering team and an extensive stock of spare parts will be available;
- The site's treatment processes have been designed to continue if a critical item of plant were to malfunction. One treatment line will continue to treat waste whilst plant is repaired on the other line. This allows the site to operate at a minimum of 50% capacity at all times; and
- Procedures for auditing performance against the contingency measures and reporting results to the Site Manager will be implemented.

## 2.13 Facility Decommissioning

The site will require a simple decommissioning consisting of the mechanical and electrical removal of all plant and equipment and the deconstruction of the fire walls. There will be no subsurface tanks or pipework, drains or potential dusty insulation to remove.

The decommissioning plan will demonstrate that:

- The plant can be decommissioned without causing pollution; and

- The site will be returned to a satisfactory state.

### 2.13.1 Permit Surrender

A SCR, (reference 416.11821.00001/SCR) dated August 2021 has been prepared in support of this EP application, setting out the baseline conditions of the site for comparison at the point of surrender.

This will be updated during the operational life of the site as appropriate. To assist with permit surrender, records will be maintained to demonstrate how the land has been protected at all times between the date of permit issue and surrender.

# 3.0 Operations

## 3.1 Process Description

OSO Fiber propose to operate a new Fiber Recycling Facility in Halesfield, Telford. The proposed activities will comprise the storage and physical treatment of cardboard waste by sorting, separation, shredding and baling to create a feedstock suitable for onward recovery in papermills. The input cardboard waste is obtained from commercial and industrial businesses and will have less than 2% contamination.

Bales of cardboard will be loaded into a de-wiring machine then along a conveyor belt to a trommel. From here material is conveyed to the primary shredder, through a magnetic separator and a Near Infrared (NIR) sorter. Material then passes through a secondary shredder, an eddy current separator and into a tertiary shredder. The treated material is then baled and sent off site for further recovery.

## 3.2 Specified Waste Management Activities

The activities that will be carried out at the site as defined under Annex II of the Waste Framework Directive can be summarised as follows:

- **R3**: Recycling/reclamation of organic substances which are not used as solvents; and
- **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).

## 3.3 Waste Types and Storage

The site will accept up to 250,000 tonnes per annum (tpa) of waste.

Up to 3,500 tonnes of waste will be stored on site at any one time and the site will be capable of treating up to 720 tonnes per day.

Waste will be stored on site for a maximum of 1 month.

The proposed waste list is shown in Table 2-1 below.

**Table 3-1**
**Proposed Waste List**

| EWC Code | Description |
|---|---|
| 15 | WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED |
| 15 01 | Packaging (including separately collected municipal packaging wastes) |
| 15 01 01 | paper and cardboard packaging |
| 19 | WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUPTION AND WATER FOR INDUSTRIAL USE |
| 19 12 | Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified |
| 19 12 01 | paper and cardboard |

| EWC Code | Description |
|---|---|
| 20 | MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS |
| 20 01 | Separately collected fractions (except 15 01) |
| 20 01 01 | paper and cardboard |

# 4.0 Waste Pre-Acceptance, Acceptance and Tracking

## 4.1 Waste Pre-Acceptance

The site will implement waste pre-acceptance procedures to ensure that enough is known about a waste (including its composition) before it arrives at the site. The procedure is required to assess and confirm that the waste is technically and legally suitable for acceptance. The procedure will follow a risk-based approach, considering:

- The source and nature of the waste;
- Potential risks to process safety, occupational safety and the environment; and
- Knowledge about the previous waste holder(s).

Enquiries for new waste streams will be managed by OSO Fiber's customer who will ensure the waste has been properly assessed and classified in line with WM3[2]. The site management will ensure the following information is obtained:

- Details of the waste producer including their organisation name, address and contact details;
- A description of the waste;
- The waste classification code;
- The source of the waste (the producer's business and the specific process that has created the waste);
- Information on the nature and variability of the waste production process;
- The waste's physical form;
- A description of the waste's odour and whether it is likely to be odorous; and
- An estimate of the quantity expected to be received in each load and in a year.

Following classification in line with WM3, the waste will be technically assessed to ensure it is suitable for storage and treatment on site and meets permit conditions.

Waste pre-acceptance records will be kept for at least 3 years and information will be reassessed if the:

- Waste changes;
- Process giving rise to the waste changes; or
- Waste received does not to conform to the pre-acceptance information.

Parameters to be checked at the acceptance stage will be determined when the acceptance of waste has been agreed with a customer.

## 4.2 Waste Acceptance

The site will implement waste acceptance procedures to check that the characteristics of the waste received matches the information provided during waste pre-acceptance. This will ensure the waste is as expected and that it can be accepted at the site.

The procedure will follow a risk-based approach considering:

- The source, nature and age of the waste;

[2] https://www.gov.uk/government/publications/waste-classification-technical-guidance

- Potential risks to process safety, occupational safety and the environment;
- The potential for self-heating; and
- Knowledge about the previous waste holder(s).

All vehicles bringing waste material to the site will report to the weighbridge or site office following which the load will be left in the lorry trailer outside the building ready to be taken in by site operators for storage and treatment. All wastes will undergo a visual inspection during deposition within the building to confirm its description and composition against the relevant accompanying documentation.

Waste will only be stored and treated at the site if the description in the accompanying documentation is in accordance with the EP and that onsite inspection confirms the waste is consistent with the description provided.

Should the wastes be found not to conform during the visual inspection, then the details will be recorded, and the waste will be removed to the designated quarantine area as appropriate.

Records of non-compliant waste received at the site will include details on:

- The quantity;
- Characteristics;
- Origin;
- Delivery date and time; and
- The identity of the producer and carrier.

Waste will not be accepted unless the site is adequately resourced to receive the waste.

The quantity of waste accepted and despatched from the facility will be calculated by recording the volume of waste entering the site and the application of standard EA conversion factors as appropriate or via a weighbridge.

A record will be kept in the site diary of all rejected wastes. In the event of non-conformance, the waste producer and the EA will be notified.

## 4.3 Quarantine

The site will have a quarantine area the location of which is illustrated on Drawing 004. The area is located within the processing building and is contained by a lego block retaining wall. The area will be used to temporarily store waste being rejected, or non-conforming waste whilst it is being assessed. The area will be clearly marked as the quarantine area.

The maximum storage volume of waste in the area will be 360m$^3$. The site will have procedures for dealing with non-conforming waste including the maximum storage time for waste in the area. If the waste has the potential to be odorous or attract pests, it will be removed from site within 24 hours to a suitably licenced facility.

## 4.4 Waste Tracking

The site will have a bespoke Enterprise Resource Planning system (ERP) which manages all site and management activities. Up-to-date information will be held related to:

- Pre-acceptance;
- Acceptance;
- Non-conformance or rejection;
- Storage;

- Repackaging;
- Treatment; and
- Removal off site.

The ERP system will also operate as the waste inventory and stock control system, including the following information as a minimum:

- The date the waste arrived on site;
- The original producer's details (or unique identifier);
- A unique reference number;
- Waste pre-acceptance and acceptance information;
- The package type and size;
- The intended treatment or disposal route;
- The nature and quantity of wastes held on site;
- Where the waste is physically located on site;
- Where the waste is in the designated recovery process;
- The staff who have taken any decisions about accepting or rejecting waste streams and who have decided on recovery or disposal options;
- Details that link waste to relevant transfer notes; and
- Details of any non-conformances and rejections, including consignment notes for waste rejected because it is hazardous.

The ERP system will be able to report on the following for each LoW code:

- The total quantity of waste present on site at any one time;
- A breakdown of the waste quantities stored pending on-site treatment or awaiting onward transfer;
- Where a batch of waste is located based on a site plan;
- The quantity of waste on site compared with the limits in the management system and permit; and
- The length of time the waste has been on site compared with the limits in the management system and permit.

Waste acceptance records will be kept for a minimum of 2 years once the waste has been treated and removed from site. A back-up copy will also be kept offsite and will be readily available in an emergency.

# 5.0 Waste Storage

Wastes will be stored on site in accordance with the site layout illustrated on Drawing 004. The following summarises the key waste storage measures to be adopted on site:

- Waste will be stored in locations that minimise the unnecessary handling of waste (i.e. within close proximity of the treatment plant input and output area);
- Waste handling will be carried out by competent staff using appropriate equipment;
- All waste will be stored and treated within the building and is therefore away from any watercourses and sensitive receptors. This also ensures that all waste will be securely stored preventing unauthorised access and vandalism;
- The maximum storage capacity for the site will be 3,500 tonnes and each storage area will hold 720m$^3$ waste bales. The quantity of stored waste will be monitored against the allowed maximum capacities;
- Waste will be processed as soon as possible and stored on site for a maximum of 1 month. Treatment will be prioritised for treatment of removal offsite based on the following:
    - Its type;
    - Its age on arrival;
    - The date of arrival; and
    - The duration of storage on site.
- Waste will be treated on a first-in-first-out basis unless more recently received wastes are prioritised because they pose a higher risk of pollution;
- Storage areas will benefit from daily cleaning using brooms and weekly washdowns using hoses;
- Storage areas will be inspected weekly to ensure there is no loss of containment; and
- Any spillages will be cleared and logged in the site diary immediately.

# 6.0 Waste Treatment

The purpose of the site operations is the physical treatment of cardboard waste by sorting, separation, shredding and baling to create a feedstock suitable for onward recovery in papermills. The full process description is detailed within Section 3.1.

Up to date details of the waste characteristics and treatment processes will be kept including the following:

- Simplified process flow sheets that show the origin of the emissions;
- Diagrams of the main plant items where they have environmental relevance including storage areas, tanks, treatment and shredder acoustic enclosure design;
- Details of physical treatment processes undertaken on site;
- An equipment inventory, detailing plant type and design parameters;
- Waste types to be subjected to the treatment process;
- The control system philosophy and how the control system incorporates environmental monitoring information;
- Process flow diagrams (schematics);
- The hourly processing capability of waste treatment equipment; and
- A summary of operating and maintenance procedures.

## 6.1 Waste Treatment Outputs, Including Fines

All outputs from the waste treatment process will be classified following WM3.

# 7.0 Emissions Control

## 7.1 Enclosure within Buildings

All waste storage and treatment will take place within the building as illustrated on Drawing 004. Undertaking all activities within the building will prevent and minimise emissions of pollution including noise, dust and odour.

The building benefits from roller shutter doors which will be shut unless accepting or removing waste to help maintain containment during vehicle ingress / egress.

The integrity of the building will be assessed monthly to look for signs of damage that could result in fugitive emissions.

Acoustic enclosures will be constructed around all shredders within the building. The enclosures will be constructed with a steel frame and rock wool board surrounded by iron.

## 7.2 Point Source Emissions to Air

There will be no point source emissions to air from the site operations.

## 7.3 Fugitive Emissions to Air

### 7.3.1 Odour

The waste types accepted onsite will be non-odorous in nature. To ensure that the generation or release of odour from the site is prevented, the following site management methods will be adhered to:

- All storage and treatment of waste will take place within the main processing building. The building benefits from roller shutter doors that remain closed unless a delivery or collection is taking place;
- Waste handling will be kept to a minimum: the waste will only be moved when loaded into the process plant or when being loaded onto a vehicle for removal off Site;
- Site operatives will ensure that the waste arriving on Site, is not overly odorous or showing signs of infestation;
- If any problems associated with odour are identified, appropriate remedial and corrective action will be implemented as soon as practicable, including the removal of any odorous waste where necessary; and
- Daily olfactory inspection will be carried out by site staff during their normal working activities if potentially odorous waste is stored on site.

If significant odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken.

### 7.3.2 Dust

The site will be operated in accordance with the DEMP (Reference 416.11821.00001/DEMP).

### 7.3.3 Noise

The site will be operated to minimise noise emissions. Measures that will be taken at the site include:

- Fixed plant will be located inside the waste reception building which is fully enclosed with roller shutter doors;

- Acoustic enclosures will be constructed around all shredders within the building. The enclosures will be constructed with a steel frame and rock wool board surrounded by iron.
- All plant will be switched off when not in use;
- Speed limits will be implemented for vehicles using the Site;
- All site personnel will be trained in the need to minimise site noise, and will be responsible for monitoring and reporting excessive noise when carrying out their everyday roles;
- All plant and equipment in use at the site will be regularly maintained to minimise noise resulting from inefficient operation of pumps, generators and engines;
- In the event that reversing alarms are found to give rise to complaints, alternative alarms or technology will be investigated;
- The regular maintenance of roads to prevent the development of potholes will significantly reduce the noise generated particularly by empty vehicles exiting the Site;
- All equipment will be maintained and operated in accordance with manufacturer's guidance and will be maintained in good working order;
- Consideration will be given to the fitting of noise suppression kits on items of plant and equipment; and
- All plant will be maintained in accordance with manufacturer's recommendations to minimise noise emissions.

Any complaint received will be logged in the site diary. The Site Manager will investigate the complaint and will take action to identify the source of the noise and implement remedial measures where appropriate.

### 7.3.4 Litter

The waste accepted on site will be received and stored in bales, which will minimise the risk of litter escaping the confines of the site boundary. Furthermore, all waste will be stored and processed inside in an enclosed waste reception building to prevent dispersion by air.

All vehicles delivering waste to the site shall be sheeted to minimise the release of litter.

All processed waste will be stored within the enclosed waste reception building prior to it being transferred to vehicles for removal offsite. The transfer of this material to vehicles will be carried out within the building, to ensure there is no release of materials.

The site will be cleaned daily, and good housekeeping procedures will be followed.

The site and site boundary will also be inspected daily by site staff. The Site Manager is responsible for ensuring that the site is monitored daily, and that investigations and remedial actions are recorded in the site diary in accordance with the management system.

### 7.3.5 Mud and Debris

The access road for the facility is accessed from Halesfield 15. Within the site the following measures will be taken in order to prevent the deposition or tracking of mud or debris from the site onto public areas or highways:

- Areas of hardstanding and impermeable surfacing will be maintained free of significant quantities of mud and debris;
- All vehicles leaving the operational areas will be cleaned as necessary to remove loose waste;
- All vehicles will be covered when loads are entering and exiting the facility; and
- Roads will be swept and cleaned whenever necessary.

In the event that mud, debris or waste arising from the site is deposited onto public areas outside the Site, the following remedial measures will be implemented:

- The affected public areas outside the site will be cleaned;
- Traffic will be isolated from sources of mud and debris within the site to prevent further tracking of mud and debris, and measures will be taken to clear any such sources as soon as practicable; and
- Provision will be made for road sweepers on the site access roads to stop any mud being carried onto public roads, and bowsers made available to damp down areas during dry periods to ensure that dust is not a problem.

The Site Manager is responsible for ensuring that the site is monitored daily, and that investigations and remedial actions are recorded in the site diary in accordance with the management system.

## 7.4 Point Source Emissions to Water (Including Sewer)

There will be no point source emissions to water or sewer from the site operations.

## 7.5 Fugitive Emissions to Land and Water

The site will be operated to prevent fugitive emissions to land and water.

### 7.5.1 Site Drainage

The site will have the benefit of impermeable surfacing throughout and there will be no connection to sewer from waste storage and processing areas on site.

The building benefits from impermeable surfacing and small amounts of runoff generated from periodic wash downs will be contained within the building and directed towards public foul sewer.

### 7.5.2 Containment Bunding

Chemicals or fuel used on site will be stored in an appropriate tank that benefits from a bund with the capacity to store 110% of the tank capacity. Bunds will be:

- Impermeable and resistant to the stored materials;
- Have no outlet;
- Be designed to catch leaks from tanks or fittings;
- Have a capacity greater than 110% of the largest tank or 25% of the total tankage (whichever is greater);
- Have pipework routed within bunded areas with no penetration of contained surface;
- Have tanker connection points within the bund; and
- Be subject to regular visual inspection.

The location of all spill kits is illustrated on Drawing 004 and the spill clean up procedure is detailed in Section 2.11.1.

## 7.6 Pests

Only cardboard waste will be accepted on site which has limited potential to attract pests. The cardboard waste will arrive to the facility in baled form and stored within dedicated areas within the building. There will be no storage of waste outside the building.

The facility will be inspected by both site management and operatives for infestations of pests, vermin and insects on a routine basis. In the event that specific waste is found to be responsible for attracting scavengers, pests or infestation, this waste will be removed from the site as soon as practicable.

A specialist pest control contractor will be hired if required.

# 8.0 Emissions Monitoring and Limits

There will be no point source emissions to air, water, land or sewer and therefore no emissions limits or formal monitoring requirements within the EP.

# 9.0 Waste Minimisation, Recovery and Disposal

The site will implement a residues management plan that:

- Minimises the generation of residues, (solid waste arising from the treatment of waste);
- Optimises the reuse, regeneration, recycling or energy recovery of residues, including packaging; and
- Makes sure residues are properly disposed of where recovery is technically or economically impractical.

The key principles of the residues management plan are:

- The site will implement waste pre-acceptance and acceptance procedures with a strict specification for material to be accepted on site aiming for less than 2% contamination for all input material;
- The treatment process will include four separation/sorting stages to recover the maximum amount of recyclable fractions from the input material. All recyclable fractions will be sent on for further recovery;
- A detailed assessment identifying the best environmental options for waste disposal will be conducted where the disposal of waste is required; and
- The options for recovering and disposing of waste produced on site will be reviewed on an annual basis to ensure the best environmental options are still being used and the recovery of waste is promoted where technically and economically viable.

# 10.0 Information

All relevant notifications and submissions to the EA regarding the site will be made in writing and will quote the permit reference number and the name of the permit holder.

Records will be maintained for at least 6 years, however in the case of off-site environmental effects, and matters which affect the condition of land and groundwater the records shall be kept until permit surrender. Duty of Care records will be kept for a minimum of 2 years.

## 10.1 Reporting and Notifications

### 10.1.1 Changes in Technically Competent Persons

The EA will be informed in writing of any changes in the technically competent management of the site and the name of any incoming person, together with evidence that such person has the required technical competence.

### 10.1.2 Waste Types and Quantities

A summary report of waste types and quantities accepted and removed from the site for each quarter, will be submitted to the EA within 1 month of the end of the quarter unless otherwise required by the permit conditions.

### 10.1.3 Relevant Convictions

The EA will be notified of the following events:

- OSO Fiber being convicted of any relevant offence; and
- Any appeal against a conviction for a relevant offence and the results of such an appeal.

### 10.1.4 Notification of Change of Operator's or Holder's Details

The EA will be notified of the following:

- Any change in the operator's trading name, registered name or registered office address; and
- Any steps taken with a view to the company going into administration, entering into a company voluntary arrangement or being wound up.

### 10.1.5 Adverse Effects

The EA will be notified without delay following the detection of the following:

- Any malfunction, breakdown or failure of equipment or techniques;
- Any accident;
- Fugitive emissions which have caused, are causing or may cause significant pollution; and
- Any significant adverse environmental and health effect.

## EUROPEAN OFFICES

### United Kingdom

**AYLESBURY**
T: +44 (0)1844 337380

**BELFAST**
T: +44 (0)28 9073 2493

**BRADFORD-ON-AVON**
T: +44 (0)1225 309400

**BRISTOL**
T: +44 (0)117 906 4280

**CARDIFF**
T: +44 (0)29 2049 1010

**CHELMSFORD**
T: +44 (0)1245 392170

**EDINBURGH**
T: +44 (0)131 335 6830

**EXETER**
T: + 44 (0)1392 490152

**GLASGOW**
T: +44 (0)141 353 5037

**GUILDFORD**
T: +44 (0)1483 889800

**LEEDS**
T: +44 (0)113 258 0650

**LONDON**
T: +44 (0)203 805 6418

**MAIDSTONE**
T: +44 (0)1622 609242

**MANCHESTER**
T: +44 (0)161 872 7564

**NEWCASTLE UPON TYNE**
T: +44 (0)191 261 1966

**NOTTINGHAM**
T: +44 (0)115 964 7280

**SHEFFIELD**
T: +44 (0)114 245 5153

**SHREWSBURY**
T: +44 (0)1743 23 9250

**STIRLING**
T: +44 (0)1786 239900

**WORCESTER**
T: +44 (0)1905 751310

### Ireland

**DUBLIN**
T: + 353 (0)1 296 4667

### France

**GRENOBLE**
T: +33 (0)6 23 37 14 14