



3. DESCRIPTION OF PROPOSED DEVELOPMENT

3.1 Facility Design

The proposed site layout is shown on drawing 023045-300/A. A complete set of engineering drawings detailing site plans, elevations, end views, drainage, etc. are provided in Section 7 of this document. Details of the existing site and proposed changes to the site are presented in the following section.

3.1.1 Site Security

Site security is provided by the following measures which will be extended to the proposed site extension:

All doors and entrance gates will be locked outside opening hours. An alarm system is installed in the main office area and processing facility. The alarm control panel is located in the main office.

A 2.1m high chainlink security fence will form the site boundaries.

The site entrance gates will comprise 2.1m high galvanised steel gates.

5 No. security cameras are located strategically around the site and include coverage of the entrance, the site offices, main yard area and warehouse entrances.

Existing lighting on site will be maintained and augmented in accordance with health and safety guidelines.

All visitors are required to report to the reception located in the main office. Site notices to this effect are placed at the site entrance.

Emergency contact phone numbers for the site manager and assistant manager are posted at the main office.

3.1.2 Access Roads

Existing access roads will be maintained and are formed of concrete.

3.1.3 Specifications for hardstanding areas

The existing site yard is composed of concrete and will be maintained. It is proposed to install an asphalt hardstand area in the eastern part of the site. This will be used for the parking of trucks, cars and empty skip storage.

3.1.4 Weighbridge

A weighbridge currently exists on site. The weighbridge has been tested and certified by the Legal Metrology Services Division of the NSAI.

3.1.5 Wheelwash

A Wheelwash will be installed near the site entrance just to the east of the weighbridge. It will be of modern design and will recycle the wash water.

3.1.6 Laboratory Facilities

There are no laboratory facilities on site. All analytical work will be carried out by independent laboratories or agents.

3.1.7 Fuel Storage

A red diesel storage tank (c. 50,000 litres capacity) is located in the southeast corner of the existing site next to the ESB substation. This tank will be removed as part of the development and will be replaced by two double contained oil tanks. One tank will be used for the storage of road diesel and the other used for the storage of diesel for on-site plant and equipment. A waste oil storage tank will be constructed on the northern side of the proposed new truck maintenance workshop. This will be used for the storage of waste oil from truck maintenance and any waste oil that inadvertently arrives on site. All oil tanks will be constructed in accordance with the requirements of double containment.

All loading and unloading of oils will be carried out adjacent to the bunds on a concrete slab with falls to an acco drain installed around the tanks and loading areas. Therefore, any leakages or spillages will flow to the acco drain which will be directed to the Klargester diesel interceptor.

3.1.8 Waste Inspection Area

A waste inspection area will be provided on the outer side of the northern wall of the main warehouse (at the eastern end of the building). Containment consists of the northern wall of the building, two low (1,200mm) walls to the east and west of the inspection area and a low concrete ramp along the northern side of the area. The inspection area will measure approximately 6.1m by 3m.

If any waste loads brought on site are deemed to require detailed checking the load is tipped out inside the inspection area for detailed inspection.

3.1.9 Waste Quarantine Area

A waste quarantine area is provided inside the warehouse along the western wall of the building. Containment consists of a large steel container.

This unit is used for the temporary storage of any unsuitable or unacceptable wastes brought on site. These wastes are transported off site at the earliest opportunity to an appropriately licenced facility.

3.1.10 Traffic Control

Traffic control from the entrance is provided by signage and a 10 mph speed limit is enforced along the access road and within the boundaries of the site.

All incoming and outgoing waste loads will be required to pass through the weighbridge and wheelwash and are documented by the weighbridge operator. The weighbridge operator directs traffic to the appropriate warehouse entrance.

All visitors are required to report to reception.

The proposed extension area at the eastern side of the site will provide ample parking for cars, trucks and empty skip storage.

3.1.11 Sewerage and surface water drainage infrastructure

An independent sewage wastewater treatment system was installed on site. This comprises a Biocycle wastewater treatment plant. Treated effluent is pumped from the plant to a percolation area located in the northwestern corner of the site. The treatment system is designed to cater for a minimum of 50 No. staff (minimum 4,000 litres/day or circa 21 population equivalents).

The percolation area was designed and constructed in accordance with the Biocycle Agreement certificate guidelines (as issued by the NSAI) and the EPA wastewater treatment manuals "Treatment systems for small communities, business, leisure centres and hotels".

Storm water drainage is divided into two separate systems. All roof drainage from the warehouse is deemed as clean rainfall and will be collected by gutters and downpipes and drained to the Ballough stream via the surface water attenuation tanks.

All open yard drainage from the existing site and proposed extension and drainage from the roofs of the offices will be collected by a system of gullies and drainage pipes. The gullies are designed to act as individual silt traps. Yard drainage will be directed through a Klargester Class 1 full retention oil separator prior to its discharge to the surface water attenuation tanks and then to the Ballough stream.

The surface water attenuation tanks will be designed to collect storm water run-off and incorporates a hydrobrake which will control the rate of discharge to the Ballough stream and reduce any potential risk of flooding in the stream.

3.1.12 Facility Accommodation

The existing and proposed offices accommodate the reception area, managerial and administrative offices, the weighbridge office, meeting room, canteen and separate tea room, locker rooms, male, female and disabled washrooms and file store.

3.1.13 Fire Control System

Smoke alarms and fire extinguishers are installed throughout the facility in the warehouse and the office accommodation. The facility is fully serviced by mains water supply and water hoses are installed strategically within the warehouse. All staff are trained in the use of this equipment for dealing with small fires only. Contact numbers for emergency services including fire brigade are clearly posted adjacent to all telephones on site. Water available for the fire brigade in case of emergency includes mains water supply, water brought on site in the fire truck and the adjacent Ballough stream.

3.1.14 Dust Suppression System

A dust suppression system was installed in the main processing areas of the warehouse. This consists of a proprietary rotary atomiser system which generates a water mist. The mist attaches to the dust and falls to the ground. There are 5 No. rotary atomiser heads located strategically within the warehouse to ensure optimum dust removal from the process. The system also allows for the inclusion of odour reducing agents (such as industrial perfumes) and insecticide agents if required. Insecticide agents are biodegradable and will only used at night during closedown if necessary.

Dust suppression systems comprising of water sprays have been installed at individual parts of the recycling plant where the potential for dust generation is highest (e.g. adjacent to drop points along the conveyor systems).

Dust generation in the picking station is controlled by a negative air pressure system.

3.2 Facility Operation/Material Management

3.2.1 Introduction

The redeveloped site acts primarily as a recycling centre and residual wastes are bulked for transport to landfill. The facility is designed to process solid and non hazardous, industrial, commercial, household, construction and demolition wastes. It is proposed that a maximum 10% of waste to be accepted at the facility will be domestic waste.

3.2.2 Waste Inflows

Three main waste streams will be handled on site:

- Construction and Demolition Waste (primarily clay, soils, sands gravels, stones, bricks, blocks and concrete)
- Commercial waste consisting of mainly cardboard, paper, mixed plastics, timber and other non hazardous wastes. Food Waste is not included
- Household and other facilities clearance wastes consisting mainly of cardboard, furniture, timber, rubble and earth.

Some domestic (municipal type) waste will also be processed at the facility (c. 9,500 t/a).

All the waste streams are processed using the same equipment.

Prior to processing, the wastes are emptied from the skips/trucks into three main areas depending on the source of the waste:

- Area 1 contains construction and demolition type wastes including house and other facilities clearance wastes consisting mainly of earth, rubble, timber, and cardboard.
- Area 2 contains commercial waste and other similar type wastes consisting primarily of dry recyclable materials (cardboards, plastics etc.).
- Area 3 which is a floor inspection area to allow an examination of the waste load prior to processing to allow removal of potentially difficult materials to handle or other problem materials.

3.2.3 Processing System

3.2.3.1 Initial pre sorting.

Large items such as pieces of steel, timber, large furniture and cardboard which will not go through the plant are removed. The objective is to have a waste material to be fed to the plant with a size not greater than 1200 mm on any one dimension.

Following pre-sorting, the waste materials are loaded into the plant and the first stage is to screen the waste using a tromel screen. This provides two distinct streams:

- Waste stream with a size less than 120 mm. This consists mainly of rubble, earth, and small pieces of paper, plastic, metal, glass and timber
- Waste stream with a size greater than 120 mm which consists primarily of cardboard, timber, plastic both solid and sheet, aggregate, metal, and timber.

3.2.3.2 Processing of the waste stream from the tromel with a size of 0 to 120mm

This stream, having been discharged from the tromel, is fed to a star screen which produces 2 waste streams:

- Material with a size of less than 15 mm, consisting primarily of earth, sand, and inert material. This material is suitable for use as landfill cover.
- Material with a size range of +15mm to 120mm. This consists of small pebble aggregate, pieces of glass and ceramic, small pieces of timber, and a light fraction consisting of small pieces of paper, cardboard, and plastic.

The material with a size range of +15mm to 120 mm is first fed through an overband magnet to remove ferrous metal. This stream is then processed using a Classifier and Wind Shifter which will give two further waste streams:

- A clean aggregate stream with a size range of +15 to 120. This can be used as an aggregate substrate in light duty pathways, domestic driveways and roads.
- A waste stream containing the light fraction consisting of small pieces of timber, paper, cardboard, and plastic. This light fraction is either land filled or included in the Refuse Derived Fuel (RDF) fraction being produced from the +120 mm stream coming from the trommel.

3.2.3.3 Processing of the waste stream from the trommel with a size greater than 120 mm

The first processing stage for this material is a picking station to remove large sheets of plastic and cling film which would interfere with the operation of the next stage of the plant. This material is baled for plastic recycling.

The next step is to feed this material through an enclosed blower system to produce two waste streams:

- A light fraction consisting mainly of small pieces of paper, plastic and cardboard. This material will be baled continuously and used either as an RDF feedstock at two locations in the UK or sent to landfill. The processing objective for this material will be to ensure the material meets the specifications as a feed stock for RDF manufacture and shipped to the UK for this purpose. In the longer term, it is possible that this material will be used in Ireland for a similar purpose.
- The balance of the waste stream consisting mainly of paper, cardboard, plastic, aggregates, and metals.

The air from this stage is recirculated to minimise any dust production.

The balance of the waste stream coming from the blower stage is then fed to a 4 stage manual picking station Sorting Cabin where, 2 grades of timber and cardboard will be picked for recycling. The fourth stage is an optional section to permit the picking of other recyclable materials depending on what type of waste stream is being processed. The waste stream could be made up of various types of plastic, non-ferrous metals etc.

The remaining waste is then fed to an over band magnet to remove steel.

This then leaves a clean aggregate with a size greater than 120 mm. It may prove necessary to have a negative picking station here to remove residual contaminants and give a good quality aggregate material. This material is shipped off site to an aggregate recycling facility such as the facilities operated by Barnmore Ltd. at Balleally Landfill, Lusk, Co. Dublin or Cement Roadstone Ltd.

The fraction coming from the negative picking station is sent to landfill or baled as an RDF material depending on the source of the waste stream which will determine what it consists of.

3.3 Waste Acceptance & Handling

3.3.1 Existing Waste Types and Quantities

The Company used to operate a similar type facility at St. Annes Cloghran, Co. Dublin up to recently. The Greenclean Facility at St Anne's Cloghran processed 23,000 tonnes of waste per year. The existing facility at Coldwinters is permitted to process 14,500 tonnes of waste per annum. It is envisaged that this will increase to 95,000 tonnes per annum within 5 years. The quantities and types of waste handled at the St. Anne's site in 2003 are presented in Table 3.3.1. This table was used to extrapolate the waste types and quantities to be processed at Coldwinters in five years time.

Table 3.3.1 Quantities of Waste handled 2003.

WASTE TYPE	TONNES PER ANNUM
Domestic Skip Waste	1274
Commercial Skip Waste	3900
Commercial Roll On/Off	5205
Commercial Rear End Loader	3991
Construction Skip	4112
Construction Roll on/off	2266
Cardboard	587
Steel	35
Plastic	32
Paper	161
Timber	800
Earth	497
Other	132
Total	23000

3.3.2 Proposed Waste Types and Quantities

The following table 3.3.2 outlines the proposed waste types and quantities to be processed by Greenclean in Year 5 at the Coldwinters facility.

Table 3.3.2

WASTE TYPE	TONNES PER ANNUM
Domestic Skip Waste	3,656.1
Commercial Skip Waste	14,530.1
Commercial Roll On/Off	19,920.5
Commercial Rear End Loader	14,904.5
Construction Skip	15,404.1
Construction Roll on/off	7,795.6
Cardboard	2,424.4
Steel	142.5
Plastic	133
Paper	665
Timber	3,296.5
Earth	2,052
Other	575.7
Domestic (municipal type)	9,500
Total	95,000

3.3.3 Hours of Operation

The Coldwinters site is open to the receiving of wastes from 0800 hrs to 1800 hrs Monday to Friday and from 0800 hrs to 1400 hrs Saturday. The facility is operational from 0700 hrs Monday to Saturday in order to prepare the site for the day's workload. The facility will be operational until 2000 hrs Monday to Friday and until 1600hrs Saturday in order to complete the processing of wastes already delivered to the site, to tidy up and close the site. The site is closed Sundays and Bank Holidays save for any emergency works such as maintenance works that may be necessary.

3.3.4 Waste Acceptance Procedure

All vehicles using the facility enter by the main gate and pass to the weighbridge. At this point the weighbridge operator carries out a preliminary visual inspection and once satisfied that the load can be

accepted, directs the vehicle to the appropriate location on-site. The weighbridge operator will ensure that the waste is in compliance with the conditions of the licence under which they will be operating and records several pieces of information such as:

- (i) the name of the carrier,
- (ii) the vehicle registration number,
- (iii) the name of the producer(s)/collectors of the waste and their waste permit number(s) as appropriate,
- (iv) a description of the waste including the relevant EWC code,
- (v) the quantity of waste accepted at, or departing from, the facility, as appropriate recorded in tonnes,
- (vi) where loads of waste are removed or rejected, details of the date of the occurrence, the types of waste and the facility which they were removed to,
- (vii) the destination of the load (facility name and waste licence/permit number as appropriate)
- (viii) the time and date of departure/arrival
- (ix) any other information which might be required from time to time subject to prior agreement with the Environmental Protection Agency (EPA).

Only loads that the weighbridge operator deems acceptable are permitted to enter the site. The weighbridge operator has full power to decide to reject those loads which are deemed to be non-conforming or unacceptable.

Closed containers such as closed rear end loaders can only be checked at the tipping point. Any documentation accompanying the load is checked at the weighbridge or tipping point to verify that the waste description is accurate. This procedure is similar to Level III characterisation and testing of waste as described in the EPA landfill manual for waste acceptance.

If for any reason the weighbridge operator is unsure of the acceptability of the waste the truck will be directed to the waste inspection area. The suspect waste load will be tipped out inside the waste inspection area and a detailed inspection of the waste will be carried out by site staff. If the waste is found to be acceptable it will be removed from the inspection area and processed in the normal way. If the waste is found to be unacceptable it will be removed to the waste quarantine area where it will be stored temporarily until it is exported off site to an appropriately licenced facility.

Unacceptable Waste

If a waste load enters the facility and it is found to be unacceptable, it is immediately removed from the disposal/recovery routes and sent to the waste quarantine area. Unacceptable waste will be identified as such if it is not included in the relevant schedule of the Waste Licence issued by the EPA. Even if a waste is included in the relevant schedule of the waste Licence it may be unacceptable in accordance with the licence depending on its moisture content. Greenclean Waste Management Ltd. intends to handle only non hazardous, commercial, industrial, household and C & D waste consisting of solid recyclable waste.

A record of the unacceptable waste will be made on arrival. All such wastes will be transferred from the quarantine area to a licensed facility for treatment as necessary.

3.3.5 Processed Wastes

Wastes that have been sorted, segregated and recycled at the facility will be exported off site. Certain wastes such as cardboards, plastics and refuse derived fuels (RDF) will be baled. Other recycled wastes such as timber, ferrous or non-ferrous metals may be baled, compacted or sized prior to export. Residual non-recyclable waste will be compacted onto large containers prior to their export off site to a residual waste landfill such as Balleally landfill, near Lusk. All wastes exported off site, regardless of their destination will be directed to the weighbridge where they will be weighed and documented prior to export off site.

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3.4 Environmental Nuisances

Only solid, non hazardous industrial, commercial, household and C&D waste will be recycled at the facility. All recycling takes place indoors and no water is added to the process. This limits the amount of environmental nuisances which could be caused by the development.

3.4.1 Aerosol Control

As described above only solid, non hazardous waste will be handled at the proposed facility. Liquid wastes will not be accepted at the site, nor will there be any open treatment of on-site wastewaters. As a result aerosol control is not considered to be an issue at the site.

The dust suppression system is designed to create a mist within the main processing building. The mist will be derived from potable public mains water supply and will be controlled by containment within the processing building.

3.4.2 Bird Control

Only 10% of the waste will be from domestic sources and the remaining wastes to be accepted at the facility consist of dry, solid non-putrescible waste. All wastes brought to the site are transported in covered vehicles and handled inside the main warehouse building. At no time can birds access the waste. For these reasons, birds are not a concern at the site and bird control is not necessary.

3.4.3 Dust Control

Waste handling occurs in a totally enclosed processing facility. This serves to contain dust within the warehouse. The processing facility is fitted with rotary and fixed atomiser systems. These systems produce a fine water droplet mist which removes the dust particles from the air. Therefore, dust is removed from the air prior to escape from the building. The density of the mist is such that water does not form or collect on surfaces; therefore no methods are required to deal with excess water within the building.

A negative air pressure system controls dust in the picking station.

3.4.4 Litter Control

With all waste types being transported in covered vehicles and handled inside the main building, no significant litter problem is envisaged at the site. In order to minimise the problem further:

- (a) Daily litter patrols are carried out at the site and environs.
- (b) A yard sweeper is routinely used.
- (c) The existing site is bounded by a high security chainlink fence on all sides, the same measures will be taken for the proposed extension.

3.4.5 Odour Control

All waste arrives at the facility in covered vehicles and is subsequently handled in contained buildings within a short space of time, normally within 12 hours (maximum 48 hours). The waste streams handled at the facility at Coldwinters include a relatively small amount of domestic waste some of which may contain putrescible material, and it is considered that no significant odours will be generated at the site. Odour control agents such as industrial perfumes can be used in the dust suppression system should it be required. However, it is unlikely that there will be any requirement for odour control.

3.4.6 Vermin Control

As very little putrescible waste will be handled at the facility vermin such as rodents and insects will not be attracted to the site. Greenclean Waste Management Ltd. contract 'Rentokil Ltd.' to control any potential vermin problems. Weekly visits to the site to check up on bait boxes laid in strategic locations throughout the facility are carried out. It is proposed that rodent control will be carried out by trapping or use of non-toxic rodenticides. The dust suppression system will have the capability to allow for the spraying of non-toxic biodegradable insecticides. These will only be used if they are required and will be sprayed at night during the closed period. It is not envisaged that there will be a need for insecticide usage.

3.4.7 Roads Cleansing

All trucks entering and exiting the site are required to pass through a wheelwash. The open yard and internal site access routes are power swept and washed as and when required.

3.4.8 Traffic Control

The traffic report carried out as part of this EIS indicates that there will be no impact on roads or road users from traffic generated by the facility. Traffic movements on site will be controlled by good signage, the weighbridge operator and the site foreman.

3.5 Environmental Emissions

The potential emissions from the proposed development are discussed under the relevant environmental topics in Section 2 and Section 4 of this EIS. A summary of all potential emissions from the operation of the Greenclean Waste Management Ltd. facility is provided here. The potential emissions from the proposed expansion of the development are noise, dust, sewage effluent, storm water and water from the wheelwash.

3.5.1 Noise Emissions

The main sources of noise emissions associated with the facility are from vehicles loading and unloading as well as general operation and movements of plant and equipment on site. The proposed operation of the facility on a 12-hour basis means that there will be no additional noise emissions at night. Noise emissions are described in detail in Sections 2.3 and 4.3. Noise emission limits will be stipulated in the EPA Waste Licence and mitigation measures have been put in place with the purpose of keeping noise levels below these limits.

3.5.2 Air Emissions

There will be no aerosol emissions from the facility and it is highly unlikely that there will be any odour emissions as very little putrescible wastes will be accepted and all waste will be processed within a maximum 48 hours (usually within 12 hours). The potential for dust generation at the site is primarily related to the handling of construction and demolition waste at the site. All waste handled at Greenclean Waste Management Ltd.'s proposed development will be handled indoors in order to reduce the potential for dust emissions at the facility. In addition, the dust suppression system installed will keep dust emissions to a minimum. It is proposed that all trucks entering and exiting the site will be directed through the wheelwash. This will ensure that mud is not brought into or out of the site. The open yard itself will be power swept and washed on a regular basis to ensure that there is no build up of mud or dust on the open yard surface. Continued efforts will be made by management to keep dust emissions to within levels that are acceptable and licensed by the EPA. Dust emissions at the site are described in detail in Section 2.2 and proposed mitigation measures are outlined in Section 4.2.

3.5.3 Sewage Effluent

Sewage effluent generated on site from the staff canteens and washrooms is treated in a Biocycle wastewater treatment plant. The treated effluent is pumped from here to a percolation area located in the northwestern corner of the existing site. The percolation area is designed and installed in accordance with the Biocycle Agreement certificate guidelines and the relevant EPA wastewater treatment manual's guidelines. Treated effluent passing through the percolation area (maximum 4,000 litres/day) receives additional natural attenuation in the unsaturated zone before mixing with the water

table. Attenuation processes include filtration, precipitation, deposition, ion exchange, adsorption and biological uptake. The resultant liquid will be diluted in the groundwater and receive further attenuation as it migrates in the direction of groundwater flow. It is likely that this will have no significant impact on groundwater or surface water.

3.5.4 Storm Water

There are two storm water systems on the site. The first of these consists of the warehouse roof drainage system which is deemed clean rainfall and is collected and drained to the proposed surface water attenuation tanks and from there to the Ballough stream. The second system consists of open yard drainage, drainage from the office roofs and drainage from the wheelwash. All of these waters pass through silt trap gullies and a Klargest Class 1 full retention oil interceptor prior to discharge to the attenuation tanks and the Ballough stream. The attenuation tanks incorporating a hydrobrake are designed to provide a buffering capacity to regulate the rate of flow to the Ballough stream and reduce any potential for flooding in the stream. Details of the storm water emissions are provided in Sections 2.6 and 4.6 of this EIS.

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3.6 Environmental Monitoring

It is proposed to carry out regular environmental monitoring at the site during the operational phase of the facility as indicated below. Any additional monitoring specified by the Local Authority or the EPA will of course be implemented.

3.6.1 Dust Monitoring

Dust monitoring will be carried out three times a year (twice in the Summer and once in the Winter) at three locations to be agreed with the EPA. Dust samples will be analysed by the Enterprise Ireland Laboratory, Glasnevin, Dublin 9.

3.6.2 Ecological Monitoring

Section 4.7 of the EIS suggests that the potential impact of the facility on the flora and fauna of the area is low and for this reason it is not considered necessary to monitor ecology at the site.

3.6.3 Noise Monitoring

It is proposed to carry out noise monitoring on an annual basis. Noise monitoring will be carried out at the site boundaries and the nearest sensitive receptor.

3.6.4 Surface Water

Surface Water quality will be monitored in the proposed storm water discharge from the site and on the Ballough stream at SW1 upstream of the site and SW2 downstream of the site. Monitoring will be carried out on a quarterly basis with one EPA baseline suite of parameters analysed on an annual basis and the EPA compliance suite of parameters analysed on all other occasions.

The proposed environmental monitoring programme outlined above will be amended and/or augmented in accordance with any requirements of the Local Authority or EPA.

3.6.5 Groundwater Monitoring

As explained in Section 3.5.3 above, the greatest risk from fugitive emissions to groundwater is an accidental spill or leak from the hydrocarbon tanks. Monitoring of groundwater in the vicinity of the site is only considered necessary in the event of such a spill.

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3.6.6 Air Monitoring

There are no significant direct emissions to air at the site. Due to the nature of the waste types acceptable at the facility there will be no generation of decomposition gases. Monitoring of fugitive emissions of dust and odours are covered in Sections 3.6.1 and 3.6.9. It is not considered necessary to monitor any other aspects of air quality.

3.6.7 Sewer Discharge Monitoring

Due to the nature of waste to be handled at the facility and the foul water management system in place (detailed in Section 3.5.3) it is deemed that sewer monitoring at the facility is not required

3.6.8 Meteorological Data Monitoring

The amount of precipitation falling on the site will have no impact on the volume of effluent produced, therefore, it is not considered necessary to monitor rainfall. It is also not considered necessary to monitor wind strength or direction at the facility. This situation can be reviewed and amended during site operation if the need arises.

3.6.9 Odour Monitoring

Due to the nature of waste to be accepted at the facility, no significant odours will be generated. For this reason it is not considered necessary to monitor odours at the site.

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3.7 Decommissioning and Aftercare

3.7.1 Decommissioning

When operations cease at the site it is expected that the bulk of the site infrastructure will be sold on to a prospective buyer as an asset. The infrastructure to be sold off would include the site buildings, offices, weighbridges, fencing, gates, lighting, fire alarm and drainage/sewage infrastructure. Other additional plant may also be required by the prospective buyer. However, if this is not the case, the additional plant such as balers, shredders, trommel, picking line, dust suppression systems, site machinery, oil storage tanks and bunds will be sold off separately or dismantled and disposed off site at a licensed facility.

When Operations cease at the site all waste will be removed and disposed at relevant licensed recovery/disposal facilities. All site surfaces will be power swept and washed to clear all debris and dust. The oil interceptor will be cleaned out. The resulting waste will be disposed of to relevant licensed facilities.

A monitoring program of all potential emissions including surface water, foul waters and dust will be carried out after this process to ensure that emissions from the site have ceased. The monitoring program will consist of 2 No. sampling rounds carried out within two months of decommissioning of the facility.

3.7.2 Aftercare Management Plan

When operations have ceased and results from the post closure monitoring show all emissions have ceased, it is expected that no long term aftercare management at the site will be necessary.

3.8 Contingency Planning

In the unlikely event of an emergency the procedures outlined in the Emergency Response Plan will be followed. The plan outlines the actions to be taken in emergencies relating to health and safety, spills, equipment breakdown and fire. The Emergency Response Plan for Greenclean Waste Management Ltd. is provided below. (And also in Appendix 3.8.1).

3.8.1 Emergency Response Procedure

3.8.1.1 Purpose:

To address emergency situations and minimise potential impacts on the environment.

3.8.1.2 Responsibility:

The Site Manager is responsible for ensuring this procedure is implemented.

3.8.1.3 Procedures:

The emergency response procedures are predicated by the types of emergency that may occur at this facility and are discussed individually below.

3.8.2 Health and Safety

In the event of any serious injury or health incidents to personnel on site the emergency number for the ambulance service is clearly posted adjacent to all telephones on site. The site manager and or assistant manager will be notified of any incidents immediately and will assume charge in order to handle the emergency as swiftly and efficiently as possible. For minor injuries the number of the local doctor who is on call will be posted beside the telephone in the site office. In addition, first aid kits are available in the site offices. Certain members of staff will be given appropriate first aid training.

3.8.3 Oil Spill/Leachate spill

All oil and diesel storage tanks are located in containment bunds. However, in the unlikely event of an oil spill the following procedure will be followed:

- a) The source of the spill will be closed off immediately if possible. The site manager or assistant manager will be notified immediately.
- b) The liquid will be contained as far as is practicable by employing absorbent booms and mats around drainage gullies and in the spill liquid itself.

- c) A waste oil tanker (or tankers) will be contracted immediately to pump liquid from interceptors and/or sediment traps.
- d) The following Agencies will be notified by telephone at the earliest opportunity: EPA; Fingal County Council; Eastern Regional Fisheries Board.
- e) All oil will be removed from the surface by either pumping or use of absorbent mats. All waste oils and materials will be disposed to an appropriate facility.
- f) Specialist firms or consultants will be retained to manage larger or difficult spills.

Absorbent booms, mats and materials are stored on site. All staff will be informed as to the location and use of the absorbent materials.

3.8.4 Breakdown of Equipment

In the event of breakdown of essential equipment all incoming waste destined for that piece of equipment will be diverted to an alternative recovery facility or directed to landfill. Waste already tipped will be reloaded and directed to an alternative facility or to licensed landfill. The staff fitter will be notified immediately and will effect the necessary repairs. If this is not possible then contract mechanics will be brought in at the earliest opportunity to carry out the repairs. In some cases, alternative plant can be hired from local plant hire companies.

3.8.5 Fire

Greenclean Waste Management Ltd. have placed emphasis on the need for fire prevention measures on site. Smoking is not allowed on site. Smoke detection alarms are employed in all buildings.

The emergency telephone number for the fire brigade is clearly posted adjacent to all site telephones.

In the unlikely event of a fire the following procedure will be employed:

- a) The alarm will automatically sound or will be switched on manually by a break glass switch by the person who first notices the fire.
- b) All staff will be evacuated from the site buildings.
- c) The fire brigade will be notified immediately.
- d) The site manager or assistant manager will be informed immediately.

- e) All incoming vehicles will be directed to an alternative facility and the site entrance kept clear of traffic and machinery.
- f) The EPA, Fingal County Council and the Eastern Regional Fisheries Board will be notified at the earliest opportunity.

It may be possible for site staff to extinguish small fires using the fire extinguishers and fire hoses. This procedure will be restricted to small fires only and the decision will be made by the site manager/assistant manager.

3.8.6 Other Emergencies

All other emergencies will be notified to the site manager/assistant manager and dealt with as speedily and efficiently as possible.

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