

Attachment A.1. – Non Technical Summary

A.1.1. Introduction

SLR Consulting has prepared this Waste Licence Application on behalf of Forge Hill Recycling Ltd (FHR). The company plans to operate a Materials Recovery Facility (MRF), at Forge Hill Road at the southern edge of Cork City, that will process up to 82,000 tonnes of mixed dry recyclables each year.

The application site was previously operated as a licensed MRF and waste transfer station by IPODEC, Onyx, Veolia and Greenstar (EPA Ref: W0173). The site was closed in 2011 and the previous licence has now expired. The site has now been purchased by Mr. Sean Murphy, the Managing Director of FHR and also the Managing Director of Killarney Waste Disposal Ltd.

The source of the feedstock will be mostly from households and commercial dry recyclable collections in Cork and Kerry. The mixed materials will be sorted into different single stream materials using state of the art plant and equipment as well as quality control picking staff. The main materials to be sorted at the facility will comprise paper, card, plastic bottles, plastic film, steel cans and aluminium cans. There is the possibility of temporary storage of other recyclables such as textiles and wood, but this would be ancillary to the main function of the MRF.

Currently, dry recyclables collected in Cork are processed in Kerry and Tipperary. Many of the single stream materials are then returned to Cork for shipment abroad. The development of the MRF in Forge Hill has therefore a number of environmental benefits including additional recycling capacity as well as reduced transport emissions.

Cork County Council granted planning permission in 2004 to operate a MRF at the site processing 82,000 tonnes per annum. FHR has just been granted planning consent to add a new building to the front of the existing waste processing buildings. There is a first party appeal against one of the conditions of that planning permission, but no third party appeals.

Cork County Council has also issued a waste facility permit to FHR to operate the MRF to a maximum throughput of 49,999 tonnes per annum. A waste licence is now required to bridge the gap between the permitted tonnage and the planning permission tonnage.

A.1.2. Site Details

The MRF is located on the southern fringe of Cork City, within the townland of Ballycurreen. The facility covers an area of approximately 1.03 hectares (2.48 acres) and is accessed from the Forge Hill Road via a junction on the N27 National Primary Road (Kinsale Road) leading from the N40 Southern Ring Road to Cork Airport.

The MRF is bounded to the north and south by other industrial and commercial premises. It is bounded to the west by a public road (Forge Hill) with other industrial premises on the opposite side of the road. To the east of the site is an area of undeveloped Greenfield land and beyond that is the N27 Kinsale Road. Figure A.1.1 below shows an aerial view of the site and the surrounding area.

Site security is provided by secure fencing, secure gates and CCTV surveillance and a monitored alarm system.

The yard areas are all hardstanding with mix of concrete and tarmacadam surfaces.

Figure A.1.1 – Aerial View of Site and Surrounding Area



The site will have a one-way traffic management plan whereby vehicles enter at the southernmost gate and exit at the northernmost gate. There are two separate weighbridges that accommodate that arrangement.

There are a number of buildings on site. The two main waste processing buildings are adjoining steel portal frame structures with a shared concrete wall where waste activities will be carried out. Waste inspection and waste quarantine areas will be provided within the buildings.

The two storey site offices are located in the southwestern corner of the site. A small building which is used to store power cleaning equipment is located in the northeast corner of the site.

On the western boundary of the site close to the exit is an ESB substation. All stationary plant and equipment will be fuelled by electricity. Mobile plant will be fuelled with diesel that is delivered direct to the plant in a mobile road tanker.

There is a weighbridge located to the south of Unit 1 (the westernmost waste recovery building) and another situated in the north western corner of the site. With the exception of a gravelled area around the offices, the open areas are paved with either tarmacadam or concrete.

FHR plans to extend the waste processing and storage area by constructing an additional building in the front (western part) of the site.

Figure A.1.2 below shows an aerial view of the site taken from Microsoft's Bing Maps website.

Figure A.1.2 – Aerial View of Site



In the past there were waste processes and storage in outdoor yards around the site, but FHR plans to process and store all wastes inside the waste processing buildings.

There are no fuel tanks on site and no plans to store fuel. Relatively small quantities of hydrocarbon oils and other potentially polluting materials will be kept on site for maintenance purposes. These materials will be stored in areas with protection against impact and containment in case of spillages.

The site is served with the following services:

- Foul Sewer
- Water mains, including fire hydrants
- Electricity, including an ESB substation
- Telecommunications

A.1.3. Site Drainage and Trade Effluent

The site drainage has been designed to separate clean run-off from potentially contaminated run-off. Run-off from the roofs of the building discharges to the local stream to the west of the site via a balancing tank that has a pumped outflow. Run-off from clean yard areas is directed to a hydrocarbon interceptor and silt trap prior to flowing to the balancing tank and pumping to the local stream.

Run-off from areas that could potentially be soiled by waste materials, such as the wash areas and the apron of the building exit doors, is directed to the foul sewer line and through a hydrocarbon interceptor. This is then discharged as trade effluent to the local authority

sewer under a discharge licence issued by Irish Water in 2015. Sewage from the site offices is also discharged to the foul sewer.

The waste processing buildings have small ramps at the doors to contain minor spillages of potentially polluting liquids such as engine oil, hydraulic oil, etc. It is planned to increase the height of these ramps to provide adequate containment for fire-fighting water within the buildings. An existing drain from the buildings to the foul sewer line will be plugged to ensure full containment of fire-fighting water.

A.1.4. Site Operation

The operator has developed an Environmental Management System (EMS) for the site. This system will ensure that the site is operated in a manner that achieves a high level of environmental performance and poses minimal risk of environmental pollution.

The EMS includes accident prevention measures and emergency procedures to address any incidents that happen at the site.

The applicant is seeking a 24 hour, 7 day licence to operate the facility to ensure that there is availability of processing capacity at all times. However, normal operation will be from 6am to 10pm on Monday to Saturday, with reduced hours on Sundays and Bank Holidays.

The facility will employ approximately 32 people, including a facility manager(s), environmental health and safety manager(s), foremen, drivers, machine operators, maintenance staff and general operatives.

The following Plant & Equipment will be used to process the dry recyclables at the facility:

- Grab Machine – to load materials into the process line.
- Metering Bunker – to regulate the feed rate.
- OCC Screen – to remove large flat fractions from the mix (e.g. large sheets of cardboard).
- OCC Optical Sort – to capture cardboard.
- Ballistic Separator – to separate materials by size and shape (2D, 3D and fines).
- Optical Separators (5 No.) – to separate plastic and paper fractions using the reflection and refraction properties of each material. Each optical separator is strategically placed and set up differently to capture different materials.
- Eddy Current Separator – to capture non-ferrous metals, particularly aluminium cans.
- Over-band Magnet – to capture ferrous metals, particularly steel cans.
- Balers (2 No.) – to produce bales of paper, cardboard, plastic film, plastic bottles, aluminium cans, steel cans, etc.
- Forklifts (2 No.) – to move bales to storage and to haulage vehicles.
- Teleporter – to move material to the balers.

All materials will be handled and stored inside the waste processing buildings with no waste handling in the yard areas.

Waste will be delivered into the buildings in enclosed vehicles and the products will be loaded into bulk haulage vehicles either inside the buildings or in a contained manner at the doors of the buildings, where the material is not exposed to the elements.

The floors of the buildings and yard areas will be kept clean by sweeping rather than washing in order to minimise the generation of waste water. The dry recyclables are not odorous and have little potential to pollute.

The facility operation will incorporate significant fire control measures including the following:

- Implementation of a Fire Safety Management Plan consistent with relevant guidelines.
- Restriction on storage volumes for combustible wastes.
- Strategic location of Fire Hydrants.
- An underground accessible water tank that is available for fire-fighting.
- Education and awareness of site personnel.
- Emergency Response Procedures
- A sprinkler system.
- Containment measures for fire-water to prevent uncontrolled discharge.

A.1.5. The Operator

FHR is a new company, but is managed by the owner of Killarney Waste Disposal (KWD) and will operate as a sister company to KWD using the technical competence and experience gained by that company. KWD has operated a licensed waste facility at Aughacurreen, Killarney for many years, processing a large quantity of dry recyclables. The development of the Forge Hill site will result in the relocation of much of KWD's recycling from Killarney to Cork, which is closer to the source of much of the input material and closer to the international markets for the baled products.

The waste licence application includes independent reports addressing potential environmental liabilities and likely future closure costs, including the cost of unforeseen liabilities or closure. FHR will ensure that there is adequate financial provision in place to cover those potential future costs.

A.1.6. Emissions and Monitoring

The only planned emission from the facility to the water environment is trade effluent in the form of run-off from wash areas and yard areas that could be exposed to soiling from waste materials. This emission discharges to foul sewer and is controlled by a discharge licence granted by Irish Water. The quantity and frequency of this emission will be rainfall dependent.

The trade effluent will be tested for flow, temperature and pH continuously and tested for a wider range of parameters at frequencies specified in the discharge licence (weekly, monthly, quarterly and bi-annually).

Clean water will be discharged to the local stream via a hydrocarbon interceptors, silt trap and balancing tank. This will be inspected daily and tested quarterly for a range of parameters.

There are no discharges to ground at the site, but there is an existing on-site groundwater well that will be tested bi-annually for a range of indicator parameters.

Dry recyclables have little potential to emit odour, dust or other pollutants to air. Dust levels have been monitored at the site in the past and will continue to be monitored at site boundary locations on a quarterly basis.

SLR Consulting carried out an odour assessment based on the type and volume of materials to be handled at the MRF. The assessment concluded that there will be no significant odour impact on the sensitive receptors in the vicinity of the site.

There will be noise emissions from the plant operating in the waste processing building. A report by AWN Consulting assessed the potential impact of these noise emissions on sensitive receptors in the vicinity of the site. The assessment concluded that there will be no significant impact at these locations. Noise levels will be monitored at site boundary locations and at the nearest sensitive receptors on an annual basis.

A.1.7. Environmental Impacts

All potential environmental impacts were assessed by experts and these assessments are included in this waste licence application. It is clear that the operation of the site will not have significant impacts on the environment or on the local community.

The polluting potential of the materials that will be handled on site is low. The quantity of hydrocarbon or other hazardous materials used on site will be very low, with no fuel storage tanks located on site. The control measures that are incorporated in the site design and in the operational plan, which will incorporate the EMS, are deemed adequate to control any unforeseen event at the site without causing significant environmental pollution.

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