

NON-TECHNICAL SUMMARY

1.0 Introduction

Killarney Waste Disposal, trading as KWD Recycling is applying to the Environmental Protection Agency (EPA) for a review of its Waste Licence for its existing waste management facility at Aughacurreen in County Kerry.

2.0 Existing Installation

The facility covers 2.2 hectares (ha) and is occupied by a weighbridge, main processing building and annex, maintenance building, plastics store, food waste storage area, metal processing and storage yard, timber storage yard, a constructed wetland and paved open yards. The current licence authorises the acceptance of 40,000 tonnes of non-hazardous household and commercial waste. The operational hours are 7.30am to 7.30pm.

KWD Recycling currently accepts, processes and stores non-hazardous residual household and commercial wastes pending transfer to other waste recovery/disposal facilities. The current licence limits the amount of waste that can be accepted annually to 40,000 tonnes. The operational hours are 7.00 am to 8.00 pm Monday to Saturdays.

The mixed municipal waste (black bin) is processed inside the main process building to remove the organic and metal wastes. The remaining materials are then stored inside the building before being sent to other waste management facilities for further processing. The organic matter is loaded into a trailer parked inside the building and when this is full it is sent to an off-site treatment plant.

The dry recyclables are sorted and bulked and the bulked materials stored inside the main processing buildings and a separate plastics shed before being sent off-site for further processing.

The food waste (brown bin) is accepted but is not handled at the site, apart from bulking up. The incoming waste is off-loaded directly into a trailer that is parked in a fully enclosed structure. When the trailer is full it is sent to an off-site biological treatment facility (compost).

The construction and demolition wastes are handled inside the main processing building, where they are sorted into the different parts, concrete rubble, metal, timber, plastics etc. The metals are then brought to the metal baling area where they are stored before being baled and cut for transport and then sent to metal recycling plants. The timber is brought to a timber storage yard, where it used to be shredded and stored before being sent off-site. The shredding stopped in 2016.

3.0 Proposed Changes

It is proposed to increase the amount of waste accepted to 59,000 tonnes annually. The existing infrastructure and processing equipment have the capacity to accommodate the increase, and the proposed development does not involve the construction of any new buildings, will not require the provision of new or additional plant and equipment. The proposed operational hours will be 6.00am to 12.00pm.

4.0 Classes of Activity

The classes of activities as listed in the First Schedule of the EPA Act as amended will be.

Class	Description
11.1	The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.

5.0 BAT / BREF Documents

KWD Recycling carried out a review of the proposed development against the BAT Conclusions Reference Document on Best Available Techniques for the Waste Treatments Industries August 2006. An assessment of how the facility will comply with the BAT Conclusions on Waste Treatment has been completed.

6.0 Waste Management Policies

The proposed changes are consistent with European Union, national and regional waste management policies and plans, the objective of which is to maximise the recovery/recycling of waste.

7.0 Raw & Auxiliary Materials and Energy Use

Raw materials and energy that are and will be used include:-

- Diesel for on-site equipment
- Hydraulic oil and engine oil for use in on-site equipment
- Electricity
- Water

8.0 Sources of Emissions

The actual and potential point and fugitive emissions are:

- Noise from plant and equipment used to process the wastes, including delivery/collection vehicles, sorting line, baler, metal baler, timber shredder.
- Rainwater run-off from the building roofs and paved yards.
- Fugitive dust and odours from waste processing.
- Vehicle exhaust gases from the delivery and collection vehicles and mobile plant.

9.0 Site Location

The facility is located at Aughacurreen, approximately 4 km to the north-west of Killarney. It is in a rural area and the surrounding land use is primarily agricultural, with some forestry. There are approximately twenty (20) residences within 500 m of the facility, the majority of which are in a 'ribbon development' along the local road to the north of the site.

10.0 Existing Environment, Potential Impacts, Mitigation and Residual Impacts

11.1 Climate

The climate in the area is mild and wet, with the prevailing wind from the south, south west. The acceptance and processing of the additional wastes will result in an increase in energy (diesel and electricity) consumption associated with their transport and processing, with a consequent increase in greenhouse gas emissions. All new developments that give rise to extra greenhouse gases are considered to have a negative effect on climate. Mitigation measures include the use of energy efficient equipment and carrying out of energy audits. The proposed development will, in conjunction with current operations have an on-going, imperceptible, negative impact on climate.

11.2 Soils and Geology

The soils comprise peat overlying tills. The combined thickness ranges from 3m in the east of the site to 5m in the west. The underlying bedrock is Namurian shale, the upper 3 to 5m of which is weathered.

The proposed change does not require either the construction of any new buildings, or any ground disturbance. The discharges to ground of the treated sanitary wastewater effluent and treated storm water from the reed beds will continue, with no changes to either the volumes or quality.

There is the potential for leaks from the above ground oil and wastewater storage tanks, the underground sump in the main processing building and leaks from the foul sewer. The potential pathways to the soil and bedrock for contaminants released at the ground surface are infiltration in areas where the paving has been damaged, and leaks from the surface water drains.

The current mitigation measures include the provision of impermeable paving across the operational areas; the inspection and repair of the paved areas; the provision and maintenance of spill containment for the above ground oil storage and wastewater holding tanks; the routine inspection and survey of the surface water and foul water drains; the adoption of an emergency response procedure, and staff training on appropriate spill response actions.

The operational areas are and will remain either paved with concrete, or occupied by buildings that prevent infiltration to ground. The proposed development will not involve any ground disturbance. The proposed development will, in conjunction with the current operations, have no residual impact on the soils and geology.

11.3 Water

The site is in the catchment of the Glanooragh River. The Glanooragh is part of the 'Glanooragh, Trib of Laune' Water Body designated in the Southwestern River Basin District Plan. The Water Body is ranked as being of 'Poor' Status based on the overall ecological status and is 'At Risk' of not meeting its objective of 'Restore' by 2021.

A local high point, approximately 500m to the south-west of the site, forms a watershed between tributaries of the Glanooragh River to the north and the Douglasha Stream to the west. A surface water drain which flows through the site joins a tributary of the Glanooragh River, approximately 250m from the site.

The site is underlain by a peat and low permeability till that range in thickness from 3m in the east to 5m in the west of the site. The subsoils are not significantly water bearing and the underlying bedrock is classified as a 'Locally Important aquifer, bedrock which is moderately productive only in Local Zones.

Rainwater run-off from the roof of the main processing building discharges to the drain that runs through the site. The discharges to ground of the treated sanitary wastewater effluent and treated storm water from the reed beds will continue.

The proposed change does not require any excavations, construction works or alteration to the existing foul and surface water drainage, and will not result in any change to the quality or quantity of the rainwater run-off to the drain and ultimately the Glanooragh River.

There is the potential for leaks from the above ground oil and wastewater storage tanks, the underground sump in the main processing building and leaks from the foul sewer. The potential pathways to off-site water courses is the surface water drainage system. The pathways to groundwater for contaminants released at the ground surface are infiltration through damaged paving and leaks from the storm water drains.

If the development does not proceed the facility will continue to operate as a waste management facility, with no change to the potential impacts on water.

The current mitigation measures include the provision of settlement tanks and an oil interceptor on the drain entering the reed beds; impermeable paving across the operational areas; the provision and maintenance of spill containment for the above ground oil storage and wastewater holding tanks; the routine inspection and survey of the surface water and foul water drains; the adoption of an emergency response procedure, and staff training on appropriate spill response actions.

The routine surface water quality monitoring carried out by KWD Recycling has established that although the ammonia levels in the rainwater run-off from the building roof is high, the discharge does not present a risk to the Glanooragh River. The groundwater monitoring indicates that there are reducing conditions in the bedrock aquifer and that groundwater quality is not being impacted by the site operations.

The proposed development will not result in any changes to the current emissions to the drain and, will not give rise to any new emission to ground and groundwater, and will have no discernible impact on surface water and groundwater quality. The proposed changes will, in conjunction with the current operation, have no discernible impacts on the water quality in Glanooragh River and will have no impact on groundwater.

11.4 Biodiversity

There are no habitats of ecological importance within the site boundary and the site is not in or close to a Special Area of Conservation (SAC) and Special Protected Areas (SPA). The nearest sites are the Killarney National Park, McGillicuddy Reeks and Caragh River Catchment SAC, which is 2km to the south-east and the Castlemaine Harbour SAC, which is 2.5km to the north.

Rainwater run off-from the roof of the main processing building enters a drain that runs through the site. The drain connects to a tributary of the Glanooragh River. The Glanooragh joins the River Laune, the majority of whose catchment is in the Castlemaine Harbour SAC.

The proposed development does not require any construction works and will not result in any loss of habitats either within, or outside the site boundary. It will not result in any new or additional emissions to the drain/Glanooragh River and will not require any changes to the current operational hours.

The current mitigation measures include the provision of settlement tanks and an oil interceptor on the drain entering the reed beds; impermeable paving across the operational areas; the provision and maintenance of spill containment for the above ground oil storage and wastewater holding tanks; the routine inspection and survey of the surface water and foul water drains; the adoption of an emergency response procedure, and staff training on appropriate spill response actions.

The routine monitoring carried out by KWD Recycling has established that the quality of the run-off to the drain is good and does not present a risk to the Glanooragh River. The Glanooragh River is a tributary of the River Laune, most of whose catchment is in the Castlemaine Harbour SAC. The proposed development will not result in any changes to the current emissions to surface water and will have no discernible impact on surface water.

The increase in the waste acceptance rate and the extension of the operational hours will have no impact on the ecosystems within the site boundary and will not give rise to disturbance in the habitats outside the boundary.

11.5 Air Quality

The facility is located in a rural area and the surrounding land use is primarily agricultural, with some forestry. There are approximately twenty (20) residences within 500m of the facility, the majority of which are in a 'ribbon development' along the local road to the north of the site.

The EPA implements a national ambient air quality monitoring programme at a number of stations across the country; however there is no nearby station that is representative of the air quality at the site. Dust monitoring has identified occasional exceedances of the dust deposition limits specified in the licence.

The impacts on air quality associated with the operation of waste management sites that accept and process biodegradable waste in general include odours, particulates (dust) and exhaust gases from vehicles.

All unloading, processing and loading of waste that have the potential to be a source of odour occurs within the main processing building and the brown bin storage area. All odour forming wastes are typically removed from the site within 24 hours of arrival and are never on site for more than 72 hours. Provision of rapid closing door on the entrance to the main processing building. All operational open yards are paved, routinely cleaned using a road sweeper and damped down with water in extended periods of dry weather. It is KWD Recycling's policy to ensure that engine idling is not permitted.

The facility accepts black bin waste and food waste that contains odorous materials. In the past three years the facility has not received any complaints from neighbours concerning odours and dusts.

The dust deposition monitoring in 2015, 2016 and 2017 has identified occasional exceedances of the deposition limits inside the site boundary, but over this period KWD Recycling did not receive any complaints from members of the public about dust fall outside the site.

Compliance inspections conducted by the EPA have never identified any concerns that odours/dusts could give rise to nuisance outside the facility boundary. The proposed change does not involve taking in any new potentially odorous waste types or introducing any new processes that would be an additional source of dust emissions. The proposed development, in conjunction with the current operations, will have an on-going slight, negative impact on air quality associated with an increase in vehicle exhaust gases.

11.6 Noise

The facility is located in a rural area and the surrounding land use is primarily agricultural, with some forestry. There are approximately twenty (20) residences within 500m of the facility.

The sources of noise are the waste transport vehicles, the mechanical waste sorting line, the baler, and the generator for the timber shredder and the shredder itself when these are in use, the metal baler and shears, vehicles moving the wastes and loading and unloading of the waste transport trucks.

With the exception of the metal baling and shearing all waste processing is carried out inside the main processing building. Site staff are instructed to avoid unnecessary revving of engines of equipment/plant when not in use, and where practical, limit the hours of activities that are likely to give high noise level emissions.

The current activities are not a source of either noise nuisance, or impairment of amenity outside the site boundary, and this has been confirmed by the results of the noise surveys carried out in 2015, 2016 and 2017. The increase in waste throughput will not change either the sources of noise at, or the noise emission levels from the facility. The proposed development will, in conjunction with the current operations, have an on-going, imperceptible, negative impact.

11.7 Landscape

The topography of the site and surrounding lands is generally low lying. The surrounding agricultural landscape comprises medium sized open fields and hedgerows, with a conifer plantation to the south-west. There is series of residential properties to the north-west, as well as to the south and south-east of the site.

The site is in an area that falls under the Rural General Zoning in the County Development Plan. Landscapes in this zoning generally have a higher capacity to absorb development than the other rural designations. The site is not overlooked by any designated Views and Prospects.

The proposed development does not involve any construction works or material changes to the existing buildings and external operations. As the existing facility is not visually intrusive and there will be no change to the external appearance, prevention and mitigation measures are not required. The proposed development will not result in any material change to the appearance of the facility. The development will, in conjunction with current operations, have a neutral impact on the existing landscape character and visual amenity.

11.8 Traffic

The facility is located in a rural area 4.5km north of Killarney and 3.3km off the N22 Killarney - Tralee National Road. The majority (80%) of the traffic to and from the site is along the local road between Ballyhar and the N22 junction at Cleeny, which is of mostly a good standard, with relatively high traffic flows. Based on the weighbridge records for 2017, when the facility accepted just under 40,000 tonnes, there were on average 92 heavy good vehicles (HGV) movements associated with the site operations.

The increase in annual waste acceptance rates will result in an additional 46 HGV movements daily. There will be no change to the number of private vehicles (staff cars) entering and leaving the site.

The visibility splay at the existing site access will be maintained and kept free of obstacles that could obstruct the view.

A traffic impact assessment completed in 2004 as part of a proposal to increase the waste acceptance rates from 16,000 to the current limit of 40,000 tonnes estimated that this would give rise to a total of 143 HGV movements and that the local and regional road network had the capacity to accommodate this traffic.

Currently there are 92 daily HGV movements associated with the site. The increase in the waste inputs will result in an additional 46 daily HGV movements. The total movements (138) is less than that predicted in the 2004 assessment, which concluded that the existing road network could accommodate this traffic volume.

The development will result in extra traffic movements, but the local road network has the capacity to accommodate the increase. The development will have an on-going, slight, negative impact on the road network.

11.9 Cultural Heritage

There is no record of any archaeological feature, protected structure, or cultural heritage feature within the site boundary. The development does not require any excavation or ground disturbance works and there is no risk of any impacts on any unidentified archaeological features. As the proposed development will not have any impact on any archaeological, architectural or cultural feature, mitigation measures are not required. The development will not have any impact on any archaeological, architectural or cultural feature.

11.10 Population and Human Health

The facility is located in a rural area and the surrounding land use is primarily agricultural, with some forestry. There are approximately twenty (20) residences within 500m of the facility, the majority of which are in a 'ribbon development' along the local road to the north of the site.

Waste management facilities that handle biodegradable wastes are a source of odours that have the potential to extend outside the site boundaries. While odours do not present a direct risk to health, they can be a significant nuisance and cause of discomfort that can indirectly affect human health.

Waste management facilities are also potential sources of other nuisance including, dust, noise, vermin and pests. Traffic associated with the facilities can, depending on the size, location and capacity of the local road network, be a cause of congestion that affects local residents.

The mitigation measures currently applied include handling the 'black bin' waste inside the main processing which is fitted with a rapid closing door; daily removal of the organic fines produced by the processing; provision of a fully enclosed structure for the storage of the food waste; typical residence time of potentially odorous waste on-site is 48 hours and is never more than 72 hours; cleaning yards using a road sweeper and damping them down in dry weather.

In the past three years the facility has not received any complaints from neighbours concerning odours, noise, dust and traffic. Compliance inspections conducted by the EPA have never identified any concerns that odours/dusts could give rise to nuisance outside the facility boundaries.

The current activities are not a source of odour, noise and dust nuisance and the proposed change does not involve taking in any new potentially odorous waste types, or any new processes that would be an additional source of dust emissions. A traffic assessment has established that the local road network has the capacity to accommodate the increased traffic movements and they will not give rise to congestion.

The proposed development, will in conjunction with current operations, have an on-going imperceptible, negative impact on human beings associated with noise emissions and traffic movements.

11.11 Material Assets

The facility is located in a rural area and the surrounding land use is primarily agricultural, with some forestry. There are approximately twenty (20) residences within 500m of the facility. The surrounding lands while of local agricultural importance do not have any particular general amenity value.

The development will not result in any loss impairment of amenity value or agricultural use. There will be an increase in fuel and electricity consumption associated with the transport and processing of the additional wastes. The development will increase KWD Recycling's waste recovery and recycling rates, which will have a socio-economic benefit. It will also contribute to maintaining employment levels, with a consequent economic benefit to the local economy.

If the proposed development does not proceed there will be no socio-economic benefit from the increased collection rate for recoverable/recyclable materials, but there will be no increase in natural resource consumption.

KWD Recycling implements the nuisance control measures specified in the current licence and also applies resource consumption control measures to minimise usage.

The current operation is not a source of adverse environmental nuisance and impairment of amenities outside the site boundary and has not adversely affected the existing economic activities in the surrounding area. The local road network has the capacity to deal with the additional traffic associated with the development. The development will have not have any adverse impact on amenity values and socio-economic activities in the locality. It will have a slight negative impact in relation to the consumption of fossil fuels. It will have an on-going slight positive socio-economic and economic benefit associated with increasing recycling rates and maintaining local employment levels.

12.0 Proposed technology and other techniques to prevent or eliminate, or where this is not practicable, limit, reduce or abate emissions from the installation

The current licence specifies the manner in which the facility must operate so as to ensure that pollution and or nuisance to neighbours and the general public is prevented. The licence conditions require the site management team to have the appropriate training and qualifications; they specify the types of wastes and processes that can be carried out; stipulate how wastes and raw materials that have the potential to cause pollution are handled and stored; describe the control measures that must be applied to prevent nuisance, for example odour and dust control, and require appropriate emergency response procedures to be in place.

13.0 Measures to Comply with Waste Management Hierarchy

The existing operation and the proposed development are consistent with the national and regional waste policy objectives, which are based on the Waste Management Hierarchy, as they contribute to the national pre-treatment capacity to get the maximum value from the waste, and to the achievement and maintenance of national and regional recycling and recovery targets.

14.0 BAT

Condition 2 of the current licence requires KWD Recycling to develop and implement an Environmental Management System for the facility. The licence also requires the preparation

operational control procedures for all waste activities and ensure that facility staff are provided with the appropriate skills and training to perform their assigned functions.

An assessment of compliance with the BAT Conclusions in the References documents on Best Available Techniques for Waste Treatment has been completed.

15.0 Abnormal Operating Conditions

KWD Recycling has adopted an Emergency Response Procedures (ERP). The ERP specifies roles, responsibilities and actions required to deal quickly and efficiently with an emergency.

16.0 Avoidance of the Risk of Environmental Pollution due to Closure of the Facility

KWD Recycling prepared an Environmental Liability Risk Assessment (ELRA) and Decommissioning Management Plan (DMP) for the facility and these have been submitted to the Agency.

17.0 Environmental Monitoring

Environmental monitoring is and will continue to be carried out in accordance with the licence conditions. The monitoring includes dust deposition, noise, surface water and groundwater.

18.0 Measures to Comply with an Environmental Quality Standard

The emission limit values set by the Agency in the new licence are and will be based on achieving compliance with the relevant EQS.

19.0 Measures to comply with Council Directive 80/68/EEC and 2006/118/EC in relation to the protection of groundwater.

The only discharges to ground are the treated effluent from the on-site sanitary wastewater treatment plant and the treated surface water run-off from the on-site constructed wetland

20.0 The Main Alternatives to the Proposed Technology, Techniques and Measures

The facility is specifically designed and has established use for waste activities and it has the capacity to accommodate the proposed increase in the amount of waste accepted. The only alternative would be to construct a new waste management facility at a different location and this offers no environmental advantage.