

1.0 Introduction

RILTA Environmental Limited (RILTA) is applying to the Environmental Protection Agency (EPA) for a review of its Industrial Emissions Licence (Register Number: W0185-01) for its existing Hazardous Waste Transfer Station at Site No 14 A1, Greenogue Business Park, Rathcoole, County Dublin. It is proposed to accept flue gas treatment residues (referred to as air pollution control residue (APCR) in this application), and transfer the material abroad for disposal/recovery. The material is classified as hazardous.

2.0 Planning Permission

Planning permission (Ref SD02A/0301) was granted for the development of the facility as a waste transfer station for the handling of hazardous and non-hazardous wastes in November 2002. South Dublin County Council has confirmed that the proposed changes do not require planning permission.

The current operations and the proposed activities do not come under the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2006.

3.0 Existing Site

The existing site encompasses 0.5ha and there are three adjoining buildings-Warehouse, Chemical Store and the Offices. There is a weighbridge at the site entrance and a covered Tanker Bay. There is a redundant backup generator in a bund in the north-eastern corner of the site. The open yards (2,760m²) are paved with a 120mm reinforced concrete slab.

4.0 Current Operations

The installation is authorised to accept up to 60,000 tonnes of waste comprising 27,000 tonnes of non-hazardous household, commercial and industrial, construction and demolition wastes, sewage and industrial sludges, and 33,000 tonnes of hazardous waste.

On-going activities include the acceptance and processing of electrical transformers inside the warehouse, the storage and onward transfer of batteries and the short term storage of refrigerators.

The transformers are stored in steel spill containment trays in the Warehouse pending the removal of the coolant oil, which is stored in the Chemical Store. The oils do not contain polychlorinated biphenyls (PCB). After the oil has been removed, the transformers are placed on a steel platform, where the copper components are removed. The metals are stored inside the warehouse pending shipment to overseas smelters.

The batteries are delivered in crates which are stored inside the Warehouse pending the build-up of enough stock for onward transfer to overseas recycling plants.

Refrigerators collected at Waste Electrical and Electronic Equipment (WEEE) drop off centres arrive in articulated trailers, which are temporarily parked before being sent to RILTA's sister company in Northern Ireland for processing.

Empty packaging is stored in the Chemical Store and the Tanker Bay is used to store clean, empty product drums.

There are five employees, comprising operatives and administrative staff.

5.0 Proposed Changes

It is proposed to install a bagging plant and pallet racking for the storage and transfer of the APCR. The bagging plant will comprise

Three storage silos, with a combined capacity of 525m³;

A pressure transfer system;

Two bulk bag loading systems (one duty and one stand-by), and a

Pallet racking system

Approximately 30,000 tonnes of APCR will be accepted, bagged and temporarily stored at the installation annually. The APCR will be delivered in road tankers that will drive into the Warehouse where the materials will be pneumatically transferred into the storage silos located in the south-west corner of the building.

The APCR will be discharged from the silos into the duty bagging unit, where bulk bags will be filled. The bags will then be stored on the pallet racking until they are transferred from the installation by articulated trailer.

6.0 Class of Activity

The current licence was granted in May 2004. In January 2014, the Licence was amended to bring it into line with the EU Industrial Emissions Directive. The authorised waste activities are:

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.
11.2 (b)	Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving the following activities: (b) physico-chemical treatment (c) blending or mixing prior to submission to any of the other activities listed in paragraph 11.2 or 11.3 (d) repackaging prior to submission to any of the other activities listed in paragraph 11.2 or 11.3 (f) recycling or reclamation of inorganic materials other than metals or metal compounds
Class	Description
11.6	Temporary storage of hazardous waste, (other than waste referred to in paragraph 11.5) pending any of the activities referred to in paragraph 11.2, 11.3, 11.5 or 11.7 with a total capacity exceeding 50 tonnes, other than temporary storage, pending collection, on the site where the waste is generated.

The bulking and transfer of the APCR falls under Class 11.2 (b)(d) and Class 11.6

7.0 BAT / BREF Documents

RILTA carried out a review of the proposed changes against the BAT Conclusions and Recommendations on best practice in the following guidance documents:

- Reference Document on Best Available Techniques for the Waste Treatments Industries 2006
- Reference Document on Best Available Techniques on Emissions from Storage 2006.
- Reference Document on Best Available Techniques Waste Incineration 2006

Assessments of how the facility complies with the BAT Conclusions on Waste Treatment, Storage and Waste Incineration have been completed.

8.0 Waste Management Policies

The current Waste Management Plan for the Eastern-Midlands Region 2015-2021 was published in May 2015. The Plan recognises the significant advances in the development of thermal recovery capacity in Ireland, where the principal use of the waste is as a fuel to generate energy.

It is policy of the Plan to improve regional and national self-sufficiency of waste management infrastructure for the reprocessing and recovery of particular waste streams in accordance with the proximity principal.

The Dublin Waste to Energy (WtE) Facility is now operational. This is a critical infrastructure project and has been clearly outlined in Waste Management Plans for the Region for some time. The generation of APCR is an inevitable consequence of the operation of the WtE facility and there is currently no recovery/disposal outlet for the APCR in Ireland. The proposed change at the RILTA installation is to accommodate the export of the APCR for disposal/recovery.

9.0 Raw & Auxiliary Materials and Energy Usage

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

- Diesel
- Hydraulic oil and engine oil
- Electricity
- Water

10.0 Sources of Emissions

The actual and potential emissions from the site are:

- Vehicle exhaust gases from the delivery and collection vehicles.
- Noise from plant and equipment used to process the wastes; including delivery/collection vehicles, cutting equipment, forklifts and bagging plant.
- Surface water run-off from the paved areas.
- Sanitary wastewater.
- Dust from waste processing and from vehicle movements on yards during dry weather.

11.0 Site Location.

The facility is located in the Greenogue Business Park, approximately 1.5km east of Newcastle. The surrounding land use is a mix of commercial and industrial activities.

12.0 Existing Environment, Potential Environmental Effects and Mitigation Measures

12.1 Climate

The climate in the area is mild and wet, with the prevailing wind direction from the south west. All new developments that give rise to extra direct and indirect greenhouse gases (GHG) emissions are considered to have a negative effect on climate. There will be no increase in the waste acceptance rates and therefore no increase in GHG from the waste transport vehicles. The waste processing will be more energy intensive than those currently carried out.

12.2 Soils and Geology

The site is entirely paved. The depth to bedrock on the site is >3.0 m. The bedrock comprises dark grey, fine grained, graded limestones with interbedded black, poorly fossiliferous shales of the Lucan Formation. The proposed change does not involve either any ground disturbance, or emission to ground. The current licence requires the routine inspection of all underground pipes and tanks to ensure they continue to be fit for purpose and do not leak. The development will have no impact on soils and geology.

12.3 Water

The site lies in catchment of the Griffeen River, whose main channel is approximately 300m east of the site.

Sanitary wastewater discharges to an internal foul sewer that connects to the foul sewer serving the Business Park Irish Water foul sewer. There are two separate surface water drainage systems. The first collects the rainwater run-off from the building roof and this is discharged via a 180m³ flow attenuation tank to the storm sewer serving the Business Park. The second collects rainwater run-off from paved areas and weighbridge and this passes through a Class 1 oil interceptor before entering the attenuation tank. The outfall from the attenuation tank connects to the fould sewer.

The proposed changes will not present an increased risk of flooding either within, or outside the site boundary. They will not affect the quality of the run-off to the municipal foul sewer.

The bedrock is classified as a poorly productive aquifer. The development will not have any impact on the rainfall contribution to groundwater and, as there will be no new emissions to ground, there will be no impact on groundwater.

12.4 Ecology

The entire site is either paved or covered by buildings. There are no habitats of any ecological importance within the site boundary and the habitat values of the surrounding lands are low. The site is not inside the boundary of any designated protection area (Natura 2000 Sites) and the development will not result either in direct loss of any habitats, or damage to a Natura 2000 Site.

The closest Natura 2000 Site with the potential to be impacted by site operations is the Rye Water Valley/Carton SAC which is 7 km north of the site. An Appropriate Assessment Screening has been completed and it confirms that the proposed change will not have any significant impacts on any Natura 2000 Sites.

12.5 Air Quality

The ambient air quality is good and the routine dust monitoring carried out in accordance with the current licence confirms dust is not an issue. Odours from the existing waste activities are not a cause of nuisance and the APCR is not odorous. The acceptance of the APCR will not result in additional traffic movements and associated exhaust gases.

12.6 Noise

The noise levels in the Business Park are typical of an area zoned for industrial use. All waste processing is and will be carried out indoors. The existing activities are sources of noise and the current licence sets noise emission levels and requires noise surveys to be conducted. These surveys have confirmed that RILTA complies with the emission limits and that the noise levels in the vicinity of the site are typical of an industrial area. The noise emissions from the bagging plant will be lower than those from equipment that previously operated at the installation.

7 Traffic

The proposed change will not result in any increase in the amount of waste accepted, meaning there will be no alteration to current traffic movements to and from the site. The local road network will not be affected

12.8 Human Beings

Land use in the surrounding area is a mix of industrial and commercial activities. The nearest house is approximately 368m from the site boundary. There are no hospitals, hotels or holiday accommodation within 1 km of the site.

12.9 Material Assets

The site is in an area zoned for industrial and related development, and it does not have a significant leisure or amenity value. The proposed changes will have no impact on amenities and leisure land use in the vicinity of the site.

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

The design and method of operation of the existing installation are based on the requirements of the European Commission's Reference Document on Best Available Techniques for the Waste Treatment Industries 2006 (BREF), which specifies the Best Available Techniques (BAT) for Waste Management Facilities.

The current licence specifies the manner in which the installation must operate so as to ensure that pollution and or nuisance to neighbours and the general public is prevented.

It requires the site management team to have the appropriate training and qualifications; identify the types of wastes and processes that can be carried out; specify how wastes and raw materials that have the potential to cause pollution are handled and stored; the control measures that must be applied to prevent nuisance, for example dust suppression, and require appropriate emergency response procedures to be in place. Rilta has prepared

a dust prevention and mitigation procedure for the APCR bagging and has revised the emergency response plan to include this activity.

14.0 Measures to Comply with Waste Management Hierarchy

The use of municipal solid waste as a fuel to generate energy is classified as a recovery activity and is higher in the Waste Management Hierarchy than disposal to landfill. The generation of the APCR is an inevitable consequence of this recovery activity. At present there are no hazardous waste recovery/disposal installations in Ireland that can recover/dispose the material and the only option is export to recovery/disposal facilities in Europe.

15.0 BAT

Condition 2 of the current Licence requires RILTA to develop and implement an Environmental Management System for the facility. The licence also requires RILTA to prepare 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.

Assessments of compliance with the BAT Conclusions in the References documents on Best Available Techniques for Waste Treatment, Emissions From Storage and Waste Incineration BAT Reference Documents have been completed.

16.0 Abnormal Operating Conditions

RILTA has prepared and adopted an Accident Prevention Policy (APP) and Emergency Response Plan (ERP). The APP specifies the approach taken to prevent accidents from occurring and the ERP identifies all potential hazards at the site, including the bagging operation that may cause damage to the environment and human health and also specifies roles, responsibilities and actions required to deal quickly and efficiently with all foreseeable major incidents and to minimise environmental impacts.

17.0 Avoidance of the Risk of Environmental Pollution due to Closure of the Installation

RILTA has prepared a Decommissioning Management Plan (DMP) for the facility that specifies the actions that will be taken to avoid the risk of environmental pollution due to the closure of the facility, including unexpected closure. The DMP along with a proposal for Financial Provision, were submitted to OEE in December 2016.

18.0 Environmental Monitoring:

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

Dust

Dust is and will be monitored annually. It is currently monitored three times a year at four locations (D1 – D4).

Noise

Noise is monitored annually at the three existing monitoring locations (N1 – N3).

Surface Water

Surface water monitoring is carried out quarterly at one location (SW1) in accordance with existing licence conditions.

Wastewater

The licence requires monitoring of process wastewater emissions. However as the current activities do not generate a process wastewater monitoring is not currently carried out.

19.0 Measures to Comply with an Environmental Quality Standard

The emission limit values set in the current licence and those that will be set in the revised licence are and will be based on achieving compliance with the relevant EQS.

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

There are no direct discharges to groundwater and the main operational areas of the site are covered by roofs and concrete yards.

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

Alternative Sites

The original EPA inspector's report for the WtE facility (Ref. No. W0232-01, 21 June 2007) states that the flue gas treatment residues (APCR) are expected to be classed as hazardous and will be sent off site for disposal in an approved hazardous waste facility. It further states that if suitable landfill is not available in Ireland for the non-recoverable residues, then export of the residues will be necessary.

While the disposal/recovery of the APCR within the state is the preferred option, there is no such outlet available the only alternative is export. The alternative to RILTA's existing hazardous waste management installation would be to develop a new standalone installation. This would require the acquisition/leasing of land, the construction of a new waste processing building and supporting infrastructure and the provision of new site services. The development of such a new facility offers no environmental advantages compared to proposed changes at RILTA's existing installation.