This Report has been cleared for submission to the Board by Senior Inspector, Mr Brian Meaney				
Signed: Donate Richards. Date: 29th June 2017				
Environmental Protection Agency As Ginumeteraction and Combined	OFFICE OF ENVIRONMENTAL SUSTAINABILITY			
INSPECTOR'S REPOR RI	T ON A WASTE LICENCE APPLICATION, LICENCE EGISTER NUMBER W0291-01			
TO: DIRECTORS				
FROM: Caroline Murphy	DATE: 29 th June 2017			
Applicant:	Forge Hill Recycling Limited.			
CRO number:	551113 (status: normal).			
Location/address:	Industrial site located at the southern edge of Cork city in the			
Application date:	8 th June 2016.			
Classes of activity applied for (under the Waste Management Act 1996 as amended): European Directives/Regulatio	 R 3 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolysis using the components as chemicals. R 4 Recycling/reclamation of metals and metal compounds. R 5 Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials. R 12 (Principal activity) Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11). R 13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced). D 15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced). 			

Activity description/background: Waste activity has taken place at this site by other operators under previous authorisations. Forge Hill Recycling Ltd is currently operating a materials recovery and transfer facility at the site under a waste facility permit (No. WFP-CK-15-0148-01) issued by Cork County Council. This operator is authorised to accept 49,999 tonnes per annum of dry recyclable waste, construction & demolition (C&D) waste and soil & stone waste. The waste licence application proposes a dry recyclable waste intake of 82,000 tonnes per annum. The principal activity will be the acceptance of mixed dry recyclable waste from households (and to lesser extent from commercial sources) for sorting into single stream waste. Single stream commercial dry recyclable waste will also be accepted for storage and bulking up prior to removal off-site. Types of waste accepted: Household and commercial dry recyclable waste. List of Waste (LOW) codes are detailed in the appendix of this report. Additional information Yes (15/08/2016 and 08/02/2017). received: No of submissions received: Two. EIS submitted: Yes (08/06/2016). NIS submitted: No Site notice check: 4/08/2016 & 15/10/2016 Site visit: None

1. Activity description/background

The site is located on the south side of Cork City in Forge Hill Industrial Estate. It is accessed from Forge Hill Road, which forms the western boundary of the facility. The eastern boundary is marked by old Kinsale Road, which is now a cul-de-sac. The site is bounded to the north and south by industrial units. The N27 national primary Kinsale Road is located approximately 40m from the facility at its nearest point.

Forge Hill Recycling Limited (hereafter the applicant) are currently authorised by Cork County Council to operate a materials recovery facility at this site with a maximum waste acceptance threshold of 49,999 tonnes per annum. Waste types accepted include dry recyclable waste, C&D waste and soil & stone waste.

As part of this waste licence application the applicant has proposed to:

- accept 82,000 tonnes of waste per annum;
- treat and store waste indoors only;
- > sort mixed dry recyclable waste into single stream recyclable waste;
- temporarily store wood, timber, textiles and glass commercial waste, prior to transfer;
- operate the facility on a 24 hours per day 7 days a week basis with normal waste acceptance hours between 6:00 – 22:00 Monday to Saturday with reduced hours on Sunday and Bank holidays.

Table 1 below shows the various waste acceptance and operation hours proposed by the applicant, outlined in the EIS, in accordance with the conditions of the planning permission, authorised by the current waste facility permit and those hours recommended in the RD.

	Applicant Proposed	EIS	Planning Permission Ref. No. 15/06426	Waste facility permit	RD
Mon. –	6:00 - 22:00	6.00 24.00	Not specified	6:30 - 20:00	6:30 - 23:30
Saturday	6:00 – 22:00 24h/7d	6:00 - 18:00	Not specified	6:30 - 22:00 6:00 - 22:00	6:30 - 17:30 6:00 - 18:00
Sunday	Reduced hours 24h/7d	8:00 – 18:00	Not specified	Not permitted	8:30 – 17:30 8:00 – 18:00
Bank holiday	Reduced hours 24h/7d	-	Not specified	9:30 – 18:00 9:00 – 18:00	8:30 - 17:30 8:00 - 18:00

Table 1: Hours of waste acceptance and hours of operation (red).

The applicant completed a noise assessment which included a noise survey over daytime periods between 14:00 - 17:00, evening periods between 22:00 - 23:00 and night-time periods between 23:00 to 00:45. The dominant intermittent noise source resulting from this survey was resultant from traffic on Forge Hill Road and the N27 national primary road. The applicant also completed a noise model to predict noise impact at four noise sensitive locations. The result of this model was a prediction that the noise sensitive locations will remain below the noise limits in *Schedule B.4* of the RD.

Condition 1.7 of the RD has taken into consideration the results of the noise model.

Further information submitted by the applicant in relation to planning permission application Ref. No. 15/06426 to the Cork County Council listed the types of wastes that were proposed to be accepted at the facility. This list did not include textiles (LoW Codes 15 01 09 and 20 01 11). In addition, the current waste facility permit does not authorise the acceptance of these LoW codes. Taking the above into consideration, *Schedule A.2* of the RD does not authorise the acceptance of LoW codes 15 01 09 and 20 01 11.

The applicant also proposed the acceptance of construction and demolition LoW codes 17 02 01 and 17 02 03; however, these are not municipal waste. *Schedule A.2* of the RD proposes the municipal LoW code equivalents 20 01 38 and 20 01 39.

Licence/Permit	Details	Date
WFP 02/01	Waste facility Permit issued by Cork County Council to IPODEC Ireland Limited to operate a Materials Handling and Recycling Facility.	1991 - 2003
W0173-01	This licence was granted to IPODEC Ireland Limited on the 9 th Sep. 2003 for a materials recovery and transfer facility with a maximum waste acceptance of 82,000 t/a of household, commercial, industrial and construction & demolition waste.	9 th Sep. 2003
	Ipodec was subsequently renamed Onyx and then Veolia Environmental Services (Ireland) Ltd.	
W0173-01 Technical	Technical amendment to provide for changes relating to energy efficiency, discharge to sewer and	8 th Jan. 2008

2. Licence/Permit History

Amendment A	decommissioning and residuals management.	
W0173-01 Technical Amendment B	Technical amendment to provide for changes to <i>Schedule A.1</i> Waste Acceptance.	15 th Dec. 2009
W0173-01 Transfer and ultimate surrender	Transfer of the licence to Greenstar Environmental Services Limited. Greenstar suspended waste activities at the facility in Sep. 2011. Greenstar went into receivership in August 2012. Starrus Eco Holdings Ltd purchased the business and assets of Greenstar in March 2014. A transfer of the licence to Starrus Eco holdings Ltd (trading as Greenstar) was completed in March 2014. The licence was surrendered on the 4th May 2016.	4 th May 2016 (date the licence was surrendered)
WFP-CK-15- 0148-01	Waste facility Permit issued by Cork County Council to Forge Hill Recycling Limited. Expiry date: 20 th Dec. 2020.	21 st Dec. 2015

3. Compliance and Complaints Record

Cork County Council confirmed that:

- one complaint in relation to odour and vermin was received since the granting of the current waste facility permit in December 2015; and
- the applicant notified the Council of two dust deposition exceedances on the 26th April 2017 and the 2nd May 2017.

The above information is discussed in Section 7 Air Emissions.

4. Best Available Techniques

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached Recommended Decision comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

5. Planning Permission, EIS and EIA Requirements

5.1 EIA Screening

In accordance with Section 40(2A) of the Waste Management Act 1996 as amended, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an environmental impact assessment (EIA), where the activity meets the criteria outlined in Section 40(2A)(b) and 40(2A)(c). In accordance with the EIA Screening Determination, the Agency has determined that the activity is not likely to have a significant effect on the environment, and accordingly is carrying out an assessment for the purposes of EIA.

5.2 Planning Status

A number of planning applications have been made in relation to activities within the facility boundary since 2003. Details of these planning applications and permissions have been provided in the application form.

The first planning permission for this facility, file number 02/4286, was finalised on the 17th Feb 2003. Cork County Council required an Environmental Impact Statement (EIS) in support of this planning application. A third party appeal was made to An Bord Pleanála on the 13th March 2003, Register No. PL 04.202198. The applicant has submitted the EIS required by Cork County Council for planning permission file number 02/4286 which was also assessed as part of appeal Register No. PL 04.202198.

Cork County Council did not require an EIS to be submitted as part of the subsequent three planning applications, register numbers 06/5945, 06/10127 and 15/06426. Planning permission Ref. No. 15/06426 was appealed on the 20th April 2016 to An Bord Pleanála, Ref. No. PL 04.246477.

An Bord Pleanála confirmed in a letter to the Agency on the 11th July 2016 that the above appeal was a first party appeal and was solely in relation to a development contribution condition and no other aspect of the development. The contribution appeal was decided on the 20th July 2016 and found that condition number 15, relating to financial contribution, of planning permission ref. no. 15/6426 should be removed.

5.3 Content of EIS and licence application

I have considered and examined the content of the licence application, the EIS and other relevant material submitted with it.

Further information was sought from the applicant on the following issues:

- 1. Fire prevention measures;
- 2. Operational practices;
- 3. Completion of tables in the application form;
- 4. Classes of waste treatment activities;
- 5. Waste storage;
- 6. Noise; and
- 7. EIS.

On receipt of further information from the applicant, all of the documentation received was examined and I consider that the information as submitted contains a satisfactory description of the project, the alternatives studied by the applicant, the aspects of the environment likely to be significantly affected by the activity, the likely effects of the activity on the environment, the forecasting methods used, the prevention and mitigation measures envisaged, the lack of difficulties and deficiencies encountered and a non-technical summary when supplemented by my assessment as contained in this report.

I consider that the EIS, when considered in conjunction with the additional material submitted with the application, also complies with the requirements of the *Waste Management (Licensing) Regulations, 2004, as amended, S.I. 395 of 2004.*

5.4 Environmental Impact Assessment Directive (2011/92/EU)

Having specific regard to EIA, this Inspector's report as a whole is intended to identify, describe and assess for the Agency the likely significant direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following environmental

factors: human beings, flora, fauna, soil, water, air, climate, the landscape, material assets and cultural heritage.

This Inspector's report addresses the interaction between those effects and the related development forming part of the wider project. The cumulative impacts, with other developments in the vicinity of the activity have also been considered, as regards the combined impacts of emissions. The main mitigation measures proposed to address the range of predicted significant impacts arising from the activity have been outlined. This Inspector's Report proposes conclusions to the Agency in relation to such effects.

In preparing this Inspector's Report I have considered and examined:

- the application, Register Number: W0291-01 and the supporting documentation received from the applicant;
- the EIS;
- the submissions received;
- the documents associated with the assessment carried out by An Bord Pleanála, in particular the inspectors report and the direction and the decision dated 5th Nov. 2003 pertaining to planning appeal ref PL04.202198 and the issues that interact with the matters that were considered by that authority and which relate to the activity.

While the environmental factors have been considered throughout my entire assessment, the following table identifies, for ease of reference, the sections of this report where each environmental factor has been specifically discussed.

Environmental Factor	Addressed in the following Sections:
Human Beings	Greenhouse gases and climate impact, fugitive dust, odour, direct storm water discharges to water, process emissions to sewer, noise, waste generation, prevention of accidents and interaction of effects.
Flora and Fauna	Greenhouse gases and climate impact, fugitive dust, odour, direct storm water discharges to water, process emissions to sewer, noise, waste generation, appropriate assessment, prevention of accidents and interaction of effects.
Soil	Greenhouse gases and climate impact, Direct storm water discharges to water, prevention of accidents and interaction of effects.
Water	Greenhouse gases and climate impact, Direct storm water discharges to water, process emissions to sewer, prevention of accidents and interaction of effects.
Air	Air emissions, greenhouse gases and climate impact, fugitive dust, odour, waste generation and prevention of accidents.
Climate	Greenhouse gases and climate impact, prevention of accidents and interaction of effects.

Table of likely significant effects

Landscape	Effects on landscape, material assets and cultural heritage, and interaction of effects.		
Material Assets	Greenhouse gases and climate impact, effects on landscape, material assets and cultural heritage, use of resources, material assets, and interaction of effects.		
Cultural Heritage	Greenhouse gases and climate impact, effects on landscape, material assets and cultural heritage, and interaction of effects.		

5.5 Consultation with Competent Authorities

The Agency consulted with Cork County Council and An Bord Pleanála under Section 42(1E)(a) of the Waste Management Act 1996, as amended.

Cork County Council did not respond to the notice issued under under Section 42(1E)(a) of the Waste Management Act 1996, as amended.

An Bord Pleanála raised the following issues in their response to the above notice in relation to the licence application and EIS (note that the original submission should be referred to at all times for greater detail and expansion of particular points):

- The activity the subject of the waste licence application appears to be materially the same as that for which planning permission was granted subject to conditions by the Board on the 6th November 2003 under appeal reference number PL04.202198. It was confirmed that an EIS was submitted with this application and that an EIA was carried out;
- None of the subsequent applications permitted since the granting of planning permission Ref. No. PL04.202198 would appear to amend or alter the substantive aspects of the development relating to the use of the site or the tonnage intake.
- The current application for a waste licence relates to 82,000 tonnes per annum intake as specified in condition no. 9 of planning permission Ref. No. PL04.202198. The activity would appear to be the same for which permission was granted subject to conditions by the Board under Ref. No. PL04.202198.

6. Submissions

There were two submissions made on this application.

While the main points raised in the submissions are briefly summarised in the table below, the original submissions should be referred to at all times for greater detail and expansion of particular points.

The issues raised in the submissions are noted and addressed in this inspectors report and the submission was taken into consideration during the preparation of the Recommended Decision.

1	Name & Position:	Organisation:	Date received:
	Mr Michael McPartland, Environmental Officer	Inland Fisheries Ireland (IFI)	29 th June 2016
	Issues raised: IFI made a request that the following	Agency Response:	
	licence granted: a monitoring regime to ensure the adjoining stream, and no interference with, bridging 	 Storm water discussed in section 8.1 below. 	
	adjacent stream or any wate vegetation to facilitate this approval of the IFI.	- These matters are outside the scope of this licence. Condition 11.3 requires the IFI to be notified of any incident which relates to discharges to water.	
2	Name & Position:	Organisation:	Date received:
	Mr Declan Hamilton	Health Service Executive (HSE)	1 st July 2016
	Principal Environmental Health Officer		
	Issues raised:	Agency	
	The Emergency Planning, Health Departments were made aware of on the 15 th June 2016.	kesponse: Submission noted.	
	The HSE have no response to make		

7. Air Emissions

7.1 Greenhouse Gases and Climate Impact

Climate change is a significant global issue which affects weather and environmental conditions (air, water and soil) which consequently affects human beings and amenities (material assets and cultural heritage) as well as biodiversity and habitats (flora and fauna). Climate change is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities.

The table below outlines the sources of GHG emissions from the activity.

Greenhouse gas emissions

Sources of GHG emissions	Vehicles
from the activity	

Relevant GHG gases	Carbon Dioxide
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The sorting of dry recyclable waste and the temporary storage of wood, timber and glass are not activities listed in Schedule 1 of the European Communities (Greenhouse Gas Emissions trading) Regulations 2012 and as such this activity will not require a GHG Emissions Permit.

With regard to reducing the climate impact of the facility, the RD requires an energy efficiency audit and an assessment of resource use efficiency to be undertaken in accordance with Condition 7.

It is considered that the likelihood of accidental emissions occurring which could impact on climate is low in light of the measures outlined in the "Prevention of Accidents" section below and the proposed conditions in the RD.

Given the small quantity of climate altering substances that could be released from the activity, in a national context, I consider that the impact of any emissions from the facility on climatic considerations should be minimal.

This facility is located in an industrial estate and is surrounded by commercial units except for the east boundary which is adjacent to a greenfield site and the national primary road N27. Any carbon dioxide the vehicles at the facility generate will be minimal in comparison to any emissions caused by vehicles using the N27 road. Therefore significant cumulative effects on the environment from the use of energy by this facility are not likely.

Based on the above assessment, I am satisfied that there will not be significant effects on climate from the operation of the activity.

7.2 *Fugitive Dust*

Dust generation is associated mainly with vehicle movements within the facility during dry weather. The surfaces at the facility have been fully concreted. Fugitive dust emissions are unlikely from the indoor treatment and storage of mixed dry recyclable waste.

For the purposes of EIA, the environmental factors potentially affected by dust emissions from the activity include: Human beings, flora and fauna and air.

Dust arising from the activity could have the potential to deposit beyond the site boundary, causing nuisance for those living nearby and potentially affect habitats located close to the site boundary.

Dust monitoring results from December 2014 from four dust monitoring points approximately located in each corner of the facility were submitted with the application. On this monitoring occasion the location nearest the exit exceeded the dust deposition limit of 350 mg/m²/d with a dust deposition level of 642 mg/m²/d. However, as the organic content of this sample was found to be 440 mg/m²/d the applicant attributed this result to high leaf fall in this area.

The applicant notified Cork County Council on the 26th April 2017 and the 2nd May 2017 with regard to the exceedance of dust deposition thresholds in the current waste facility permit.

Construction and demolition waste and soil are authorised for acceptance under the current waste facility permit; however, these wastes types have not been proposed for acceptance as part of this licence application.

Mixed dry recyclable waste makes up the majority of the waste proposed for acceptance at this facility and dust generation from this waste type should not be significant. To a lesser extent single stream recyclable waste including segregated glass, wood and timber waste will be accepted for storage and transfer at the facility. Dust generation potential from these waste types will be minimised as they will be accepted for transfer only. Minimising dust formation is mainly a function of good housekeeping at the facility and keeping the concrete surface in a clean condition. The RD provides for site roads and other relevant areas to be sprayed with water to minimise dust emissions. Condition 3.21 requires dust curtains to be installed and maintained at entry/exit points to the building.

Accidental fugitive dust emissions could occur if the concrete work surface is not kept clean. However the likelihood of accidental fugitive dust emissions is considered low in light of the measures outlined in the "Prevention of Accidents" section below and in light of the proposed conditions discussed above.

There are no other developments, facilities or activities in the vicinity which are likely to release significant quantities of dust that could lead to likely or significant cumulative effects from dust deposition on any area beyond the facility boundary.

Based on the above assessment, I am satisfied that there will not be significant effects on the environment from dust emissions from the activity.

7.3 Odour

As discussed in section 7.2 mixed dry recyclable waste is the main waste type at this facility and the only waste type which will be treated. Other wastes proposed to be accepted are not odorous (glass, wood and timber). Odour emissions from the facility are unlikely due to the nature of the waste accepted and the fact all waste will be treated and stored indoors.

For the purposes of EIA, the environmental factors potentially affected by odour emissions from the activity include: Human beings, fauna and air.

Odour generated from the activity could have the potential to disperse beyond the site boundary, causing nuisance for those working and living nearby and potentially affecting habitats located close to the site boundary. Condition 5 of the RD prohibits the licensee from allowing a nuisance to be caused by odour emissions from the facility.

Since the facility was first permitted by Cork County Council on 21st December 2015 one complaint has been received in relation to odour and vermin.

The applicant completed an odour assessment in April 2016 and determined that, for the 10 local receptors, the likely odour effect was negligible due to:

- > the non-odourous waste types proposed for acceptance at the facility;
- waste treatment and storage taking place indoors only;
- the proposal to install roller shutter doors;
- leachate not being generated; and
- all contaminated run-off from yard areas being collected and drained to sewer.

Preventative actions relating to odour and vermin nuisance recommended in the RD include:

- Condition 8.9.6 prohibits food, residual or odour-forming wastes from being accepted at the facility;
- Condition 3.21 requires the installation of dust curtains and roller shutter doors which are required to be kept closed when not in use;
- Condition 8.2 requires all waste processing and storage to be carried out inside the waste treatment building;
- Condition 6.18.1 requires the floor of the building to be cleaned on a weekly basis;
- Condition 8.11 requires the establishment of a waste storage plan which will limit the quantity of waste stored at specified locations within the building and the maximum holding period for which waste can remain in each storage area;
- Condition 8.9.5 requires that rejected waste moved to the quarantine area is stored under appropriate conditions to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition;
- Condition 6.23 requires the establishment and implementation of a programme for the control and eradication of vermin;
- Condition 6.22 requires nuisance monitoring to be carried out at weekly intervals.

Conditions 5.2 and 5.6 require that odour and vermin do not cause nuisance. Condition 6.20.4 provides for the carrying out of an odour assessment, and any recommendations resultant from this assessment would be required to be implemented once agreed by the Agency.

Accidental odour emissions could occur if contaminated waste was accepted at the facility. However the likelihood of accidental odour emissions occurring is considered low in light of the measures outlined in the "Prevention of Accidents" section below and in light of the proposed conditions relating to odour emissions discussed above.

There are no other developments, facilities or activities in the vicinity which are likely to generate significant quantities of odour that could lead to likely or significant cumulative effects from odour on any area beyond the facility boundary.

Based on the above assessment, I am satisfied that there will not be significant effects on the environment from odour emissions from the activity.

7.4 Overall Conclusions in relation to effects of air emissions from the activity on the environment

I am satisfied that there will not be significant effects on climate, air quality, human beings, flora and fauna or any other aspect of the environment from fugitive dust and odour emissions arising from the operation of the activity.

8. Discharges to Water and Ground

8.1 Direct Discharges to Waters

8.1.1 Direct Process Emissions to Waters

There are no direct process emissions to waters at the facility.

8.1.2 Direct storm water discharges to waters

The table below gives details of the facility's storm water discharge to water, the sources of potential contamination of this discharge, the type of on-site abatement, as well as details of the receiving water.

Emission point details					
Emission Reference	Proposed / Existing	Potential contamination	Abatement	Receiving water	
SW-1	Existing	Vehicles in non-process yard areas	Silt trap Oil separator (Condition 3.9)	The Lehenagh Beg Stream which in turn flows into the Tramore River (also referred to as the Douglas (Lee) River).	

Automatic diversion in place: Yes, addressed by Condition 6.13 of the RD.

Trigger levels specified in RD: Addressed by Condition 6.13 of the RD which requires trigger levels for conductivity, total suspended solids, biological oxygen demand (BOD) and mineral oils to be established within six months of the date of grant of this licence.

Firewater retention infrastructure: Addressed by Condition 3.10 of the RD.

For the purposes of EIA, the environmental factors potentially affected by storm water discharges to waters include: Water, soil, flora and fauna, and human beings.

Should an accidental emission occur, e.g. oil leak from a car, it has the potential to discharge through SW-1 to the Lehenagh Beg Stream. This could affect surface water quality downstream, as well as aquatic habitats within that surface water. Should an accidental emission discharge to ground as a result of, for example, an oil leak from a car, this could potentially affect the quality of soil and groundwater directly, which could affect those using the groundwater body as a source of drinking water and could potentially indirectly affect surface quality downstream.

Assessment and mitigation

- It is unlikely that the storm water coming from the building roof and nonprocess yard areas will result in the contamination of the storm water discharge. The silt trap and oil separator required by the licence will remove any minor contamination of the storm water from these areas prior to discharge.
- Condition 2.2.2.9 requires the licensee to maintain a preventive maintenance programme which should ensure both the silt trap and oil separator are fully operational at all times.
- The licensee is required to set trigger levels for conductivity, total suspended solids, BOD and mineral oils on the storm water discharge. If these trigger levels are exceeded the licensee is required to divert these storm waters to a retention facility for subsequent disposal.
- There are no drinking water abstraction points downstream from the facility.

- The licensee is required to maintain an impermeable concrete surface in all areas of the facility. This reduces any risk of any contamination going to ground.
- A Fire Water Retention Risk Assessment is required to be submitted to the Agency within three months of the date of grant of this licence.

The storm water discharge was sampled on the 26th January 2015; however, the site was not operational at that time as the facility's permit was granted in December of that year. When compared to the *European Communities Environmental Objectives (Surface Waters) Regulations 2009*, as amended, the results of this monitoring do not highlight any baseline run-off contamination in the rainwater run-off from the facility.

The applicant has not reported any exceedance, to Cork County Council, of the surface water discharge limits in Schedule B.3 of their waste facility permit since the permit was issued in December 2015.

The RD requires the licensee to maintain the storm water/rainwater collection system. It also requires the storm water discharge to be visually inspected daily and monitored for various parameters including conductivity, total suspended solids, BOD, mineral oils, chemical oxygen demand (COD), total organic carbon weekly, in accordance with *Schedule C.2.3 Monitoring of Storm Water Discharges.* The RD also states that there can be no unauthorised discharge of polluting matter to the storm water drainage system.

The RD contains standard conditions in relation to the management of materials and wastes. The RD also requires that accident and emergency response procedures are put in place. The controls pertaining to accidents and emergencies are addressed in section 13 below. These measures will help to control any impacts which could occur should any mitigation measures fail.

It is therefore considered that direct impacts as a result of storm water emissions through SW-1 are considered to be neither likely nor significant.

The cumulative impacts of rainwater run-off from SW-1 and from the hardstanding areas in the industrial estate to the Lehenagh Beg Stream should not be significant. It is also considered that no indirect effects are likely as a result of these surface water emissions from the activity.

I am satisfied that based on the above assessment, the nature of the activity, the mitigation measures in place, and the conditions in the Recommended Decision that the likelihood of a significant effect on the environment occurring as a result of storm water emissions from SW-1 is negligible.

8.2 Emissions to Sewer

The table below gives details of emissions to sewer.

On-site treatment					
Emission Reference	Proposed / Existing	Process Description	Abatement	Proposed max. flow (m ³ /day)	

FW-1	Existing	Runoff from yard areas which could potentially be soiled by waste, e.g. the wash areas and the apron of the building exit doors, is directed to an Irish Water sewer via a hydrocarbon interceptor.	Hydrocarbon interceptor. Irish Water authorised discharge to sewer.	100m ³	
Off-site treatment					
Name of sewer network/agglomeration: Cork City					

Responsible authority for network/agglomeration: Irish Water

Type of treatment: Secondary.

Receiving water name (and waterbody type): Lough Mahon (transitional water body)

Waste water discharge authorisation: Reg. No. D0033-01, for Cork City Waste Water Treatment Plant located at Carrigrennan on Little Island.

The maximum discharge volumes from the facility represent about 0.4% of effluent discharge volumes from the Irish Water municipal wastewater treatment plant (MWWTP). The Agency's most recent national annual report on urban waste water¹ indicates that this MWWTP is in compliance with its discharge limits for BOD and COD, but not in compliance for nitrogen.

For the purposes of EIA, the environmental factors potentially affected by a process emission to sewer include: Water Quality, Flora and fauna, Human beings.

Should emission levels in the discharge to sewer cause an exceedance of Water Quality Standards at the discharge point of Cork City waste water treatment plant, this could have implications for aquatic flora and fauna and their habitats at that discharge point.

Assessment and mitigation

The Agency sought Irish Water's consent under Section 52 of the Waste Management Act 1996, as amended, with regard to this application and consent was granted on the 17th May 2017 and revised on the 28th June 2017. *Schedule B.3* in the RD satisfies Irish Water's requirements.

The applicant asserts that the facility is at very low risk of exceeding these discharge limits due to the nature of materials handled at the facility.

Condition 5.7.1 only authorises the discharge of trade effluent authorised by this licence. *Schedule C.3.1 Control of Emissions to Sewer* and *Schedule C.3.2 Monitoring of Emissions to Sewer* also reflect Irish Water's requirements. *Schedule C.3.1* requires the control of suspended solids, mineral oils, and fats, oil and grease prior to discharge to sewer. *Schedule C.3.2* requires the continuous monitoring of the flow of trade effluent to sewer and the monitoring of a range of parameters.

In addition to the discharge limits, Irish Water also specified 12 additional requirements relating to the discharges to sewer. Six of these requirements are

¹ Urban Waste Water Treatment in 2015 (EPA 2016).

provided for in the standard conditions of the RD. The remaining 6 requirements have been transposed into the RD as new conditions. These additional requirements have been included as Condition 5.7 *Emissions to Sewer – Irish Water conditions.*

The local authority has not received any notifications from the facility with regard to emissions to sewer from the facility.

Accidental emissions to sewer could occur if the hydrocarbon interceptor malfunctioned, causing an untreated discharge to sewer. However the likelihood of accidental emissions to sewer occurring is considered low in light of the measures outlined in the "Prevention of Accidents" section below and in light of the proposed conditions discussed above.

The facility is located in an industrial estate connected to a municipal sewer controlled by Irish Water. Any activity which connects to the sewer requires an authorisation from Irish Water. Therefore, it is considered that there will be no significant cumulative impact from sewer emissions from the activity and other sewer emissions generated by other commercial activities in the area. It is also considered that no indirect effects are likely as a result of sewer emissions from the activity.

I am satisfied that based on the above assessment, the nature of the activity, the mitigation measures in place, and the conditions in the Recommended Decision that the likelihood of a significant effect on the environment occurring as a result of a process water discharge to sewer at FW-1 is negligible.

8.3 Discharges to ground/groundwater

There are no direct or indirect emissions to ground or groundwater at the facility.

There is no history of ground or groundwater contamination at this facility.

There are two underground tanks at the facility for the storage of firefighting water and for storm water attenuation. Condition 6.10 requires the integrity testing of underground tanks and pipework.

All contaminated run-off and storm water is collected for discharge to sewer and surface water respectively at this facility in accordance with the conditions of the RD.

A groundwater monitoring well is located at the facility (GW-1) and the applicant sampled groundwater from this well on the 5th June 2014. Most parameters tested were below the limit of detection; however, the level of chloride was 46.7mg/l. This is above the Interim Guideline Value (IGV)² of 30mg/l but below the Groundwater Threshold Value (GTV)³ of 187.5mg/l. Manganese levels were found to be 0.943mg/l which exceeded the IGV of 0.05mg/l. Manganese is found widely in soil and groundwater and chloride exists in all natural waters.

The applicant compared historical results from GW-1 from 2001 and 2002 and noted slighted elevated parameters including barium sulphate, nitrate and chloride. The results from analysis at GW-1 in 2014 are similar in range to historic results and the applicant feels that these levels are resultant from general groundwater quality in the area rather than activities specific to the facility. The facility is fully concreted, treatment and storage activities are confined indoors, and all run-off from the site is diverted for appropriate collection.

² Towards Setting Guideline Values for the Protection of Groundwater in Ireland – Interim Report (EPA 2003).

³ EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010).

Schedule C.6.2 of the RD requires groundwater from GW-1 to be monitored biannually which will allow for groundwater quality beneath the site to be trended over the facility's lifetime.

I am satisfied that there will not be significant effects on human beings, flora and fauna, water quality, soil quality or any other aspect of the environment from emissions to water and ground arising from the operation of the activity.

9. Noise

The predominant noise in the area is traffic noise, given the facility's location just off the N27 National Primary Road.

Noise sources at the facility include waste separation plant inclusive of a trommel, two bailers, a loading shovel and a forklift. This plant has the potential to generate noise; however, Condition 2.2.2.9 requires a preventative maintenance programme at the facility to maintain plant operating effectively.

The applicant accounted for a maximum of 13 articulated trucks movements per day, as a worst case scenario, in their noise assessment completed in April 2015. The applicant predicted plant noise levels at four nearby residential noise sensitive monitoring locations. The noise predictions demonstrated that operations at the facility will comply with the noise limit values in *Schedule B.4* of the RD. The applicant has proposed noise monitoring at three noise sensitive locations (NSL1 – NSL3) and four site boundary locations (N1 – N4) and *Schedule C.5 Noise Monitoring* reflects this.

For the purposes of EIA, the environmental factors potentially affected by noise emissions include: flora and fauna, and human beings.

No noise complaints have been received by Cork County Council relating to activities at the permitted facility.

Accidental noise emissions could occur if the doors of the facility remained open or a greater number of vehicle movements occurred per day, causing noise ELV exceedances at the noise sensitive receptors. However the likelihood of accidental noise emissions occurring is considered low in light of the measures outlined in the "Prevention of Accidents" section below and in light of the proposed conditions discussed above.

It is therefore considered that direct significant impacts as a result of noise from the activity are unlikely.

The applicant's baseline noise survey identified the nearby N27 National Primary Road and the Forge Hill Road as the dominant noise sources in the area.

Therefore, it is considered that there will be no significant cumulative impact from noise emissions from the activity and other noise emissions generated by other commercial activities in the area. It is also considered that no indirect effects are likely as a result of noise emissions from the activity.

There are no other activities in the vicinity that are likely to generate noise to an extent that could lead to likely or significant cumulative effects beyond the site boundary.

Overall Conclusions in relation to effects of noise emissions from the activity on the environment

Based on the above assessment and the controls in place, I am satisfied that there will not be significant effects on the environment from noise from the facility.

10. Waste Generation

The treatment of mixed dry recyclable waste will generate fines (550 – 1,200 tonnes per month) which are not suitable for recovery. These fines will be removed from the facility by an authorised waste collector for either the production of SRF or disposal in a landfill facility. The RD requires that all waste generated on site is transported and recovered/disposed off-site in accordance with national and European legislation.

Condition 8.10 prohibits the disposal of waste which was accepted at the facility for recovery.

For the purposes of EIA, the environmental factors potentially affected by waste generated by the activity include: human beings, flora and fauna and air.

The storage of uncovered wastes at the facility could generate dust. If fines contain any organic fractions they may generate odour or attract vermin. Dust deposition, odour and vermin have negative secondary effects for humans in terms of amenity and could also be an issue for flora and fauna beyond the facility boundary.

Assessment

There are conditions in the RD pertaining to the storage and management of waste generated by the activity.

Condition 8.11.3 requires a maximum storage or holding period for waste in waste stockpiles to be identified and adhered to as part of the Waste Storage Plan and for the recommendations of the Fire Risk Assessment (Condition 9.5) to be taken into consideration in the Waste Storage Plan.

In relation to dust and odour generation and vermin, mitigation measures have been discussed in sections 7.2 and 7.3.

If dealt with in accordance with the conditions of the RD, the management of waste generated at the facility will be in accordance with the requirements of Section 29 (2A) of the Waste Management Act 1996 as amended.

Significant cumulative effects on the environment from the generation of waste by this facility and other developments are not likely.

Overall Conclusions in relation to effects of the generation of waste from the activity on the environment

Based on the above assessment and the mitigation measures in place, I am satisfied that there will not be significant effects on the environment from the generation of wastes from the operation of the activity or from pests or vermin.

11. Use of Resources

The operation of the facility involves the consumption of water, diesel and electricity. The estimated quantities to be used at the facility are given below.

Resource	Quantity per annum
Electricity	1.55 million units
Water	Unknown (mains source).

Diesel	70,000 Litres

For the purposes of EIA, the environmental factors potentially affected by resource use include material assets.

Condition 7 of the licence provides for the efficient use of resources and energy in all site operations. It requires a Resource Use and Energy Programme to be established and an energy audit to be carried out and repeated at intervals as required by the Agency.

The facility is located in an industrial area with most of the developments in the vicinity of the facility being commercial premises, all of which would use various levels and types of resources. Therefore significant cumulative effects on the environment from the use of resources by this facility and other developments are not likely.

Overall Conclusions in relation to effects of the use of resources by the activity on the environment

I am satisfied that there will not be significant effects on the environment from the use of natural resources from the operation of the activity.

Summary of potential accidents and prevention/mitigation

12. Prevention of Accidents

Table 2

measures			
Accidental emissions due to waste management practices.	The RD limits the waste types and quantities accepted into the facility and require these waste types to be characterised.		
	The RD limits the waste activities that can take place at the facility.		
	The RD also sets out requirements in relation to operation, control and monitoring activities.		
Accidental emission to air from site vehicles which may impact the climate.	The RD requires a preventative maintenance programme which will include vehicles and plant used at the facility.		
Dust emissions resulting from: (i) Dirty concrete surfaces; (ii) Build-up of waste; and (iii) Incoming waste not adequately inspected and segregated.	In addition to the above the RD sets out requirements in relation to concrete surfaces, dust suppression, waste storage controls, the inspection of incoming waste and the maintenance of a quarantine area.		

Measures to be taken to prevent accidents and limit consequences

Accidental odour emissions resulting from the acceptance of contaminated waste.	In addition to the above the RD requires the licensee to reject unacceptable incoming waste.
Accidental emissions to sewer resulting from a malfunction of the class 1 oil interceptor.	The interceptors will be included in the facility's preventative maintenance programme and are required to be properly maintained at all times.
Accidental emissions to surface water resulting from the storm water silt trap and interceptor.	In addition to the above the RD requires a storm water management system.
Accidental noise emissions from the facility due to open doors or from plant which is not maintained.	The RD requires the installation of roller shutter doors which are to be kept closed when not in use. The RD requires all plant, equipment and vehicles to be maintained.
Accidental emissions to ground from a failure of the run-off collection system or due to seepage through damaged concrete.	The RD requires any cracks in the concrete to be repaired and for all underground pipes to be integrity tested. The RD requires all any storage or hydrocarbons in drums and the refuelling of vehicles to take place within the building.
Preventative/Mitigation measures to reduce the likelihood of accidents and mitigate the effects of the consequences of an accident at the facility.	The RD requires the completion of a Fire Risk Assessment and for any relevant recommendations to be incorporated into the waste storage plan. A sprinkler system is in place at the facility. The applicant has calculated the fire water retention capacity of the building to be adequate.
Additional measures provided for in the RD	Integrity of tanks to be assessed every 3 years and maintenance carried out as required (Condition 6.10). Storm water discharge points to be visually monitored daily (Condition 6.13.1). Provision and maintenance of adequate bunding.

Condition 9 of the RD requires procedures to be put in place to prevent accidents with a possible impact on the environment and to respond to emergencies so as to minimise the impact on the environment. An Environmental Liabilities Risk Assessment (ELRA) was submitted with the application. (See Fit and Proper section below for further details).

The licensee submitted calculations on the amount of firefighting water required for the facility and the retention facilities on-site. The original building requires 830m³ of firewater and has available firewater containment of 865m³. The extension requires 857m³ of firewater and has available containment of 865m³. The original building and the extension have a connection to the sewer. A firebreak wall has been constructed

to ensure any fire will not spread between the original building and the extension. The facility has attained a fire certificate from Cork County Council.

Conditions 9.5 and 3.10 require a fire risk assessment and a revised fire-water retention risk assessment to be submitted within 3 months of the date of grant of this licence. Condition 8.11.3 requires any recommendations from the fire risk assessment to be considered as part of the Waste Storage Plan.

The risk of accidents and their consequences, and the preventative and mitigation measures listed in the table above, have been considered in full in the assessments carried out throughout this report.

It is considered that the conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13. Cessation of activity

The application details a range of measures to be employed upon cessation of the activity in the company's Emergency Response procedure. These include:

- Removal of all waste materials from the facility for recovery or disposal at an authorised facility;
- Clean down of plant and equipment to attain a positive value or removal from site for recovery or disposal;
- Cleaning of indoor floor areas and the yard area;
- Cleaning interceptors and silt traps of all contaminants;
- Removal of all potentially polluting materials e.g. oil drums off site for reuse;
- Completion of a closure validation report;
- Condition 10 of the RD requires procedures to be put in place to ensure the proper closure of the activity with the aim of protecting the environment. The licensee submitted a Closure and Decommissioning Plan with this application. (See Fit and Proper section below for further details).

The measures to be taken upon cessation of the activity have been considered in full in the assessments carried out throughout this report.

I am satisfied that there will not be significant effects on the environment from the measures that will be taken upon cessation of the activity.

14. Other matters

14.1 Effects on landscape, material assets and cultural heritage

(a) Disturbance of archaeology and architecture from the operation of the activity

Any loss of archaeological or architectural heritage could impact negatively on human beings. These matters were dealt with in the decision of the planning authority to grant planning permission for the developments on site and are not controlled by the Agency.

The Inspector's Report relating to the permission granted by An Bord Pleanála (PL 04.202198) in 2003 did not highlight any impact on archaeology and architecture from the operation of the facility.

(b) Landscape, visual and cultural impact

Any disturbance of the landscape or the cultural heritage of an area has the potential to impact on human beings and their enjoyment of the surrounding area. These matters were dealt with in the decision of the planning authority to grant planning permission for the developments on site and are not controlled by the Agency. The planning authority has considered the impacts to be acceptable.

The Inspector's Report relating to permission Ref. No. PL 04.202198 stated that the site is located in an area zoned industrial and is not within a formal or proposed designated landscape area and that the facility does not infringe on heritage. The applicant identified the facility as a having a positive effect in terms of material assets, stating that the facility is needed to manage dry recyclable waste collected from households in Cork, Kerry, Clare and Limerick.

No mitigation measures have been proposed in relation to (a) and (b) above.

Overall Conclusions in relation to effects on landscape, material assets and cultural heritage from the activity

I am satisfied that there will not be significant effects on landscape, material assets and cultural heritage from the operation of the activity.

Accordingly, if the activity is carried out in accordance with the RD and the conditions attached, the operation of the activity will not cause environmental pollution.

14.2 Interaction of effects

I have considered the interaction between human beings, flora and fauna, soil, water, air, climate, landscape, material assets, cultural heritage and the interaction of the likely effects identified throughout this report.

The interaction between factors as a result of the operation of the facility are summarised below:

	Human Beings	Flora and Fauna	Soil	Water	Air	Climate	Material assets, landscape, cultural heritage
Human Beings							
Flora and Fauna	1						
Soil	1	1					
Water	1	1	1				
Air	1	1	1	1			
Climate	1	1	1	1	1		
Material assets, landscape,	✓						

Interaction of effects

cultural				
heritage				
nontago				

The most significant interaction, as addressed in the earlier parts of this report, is as follows:

Noise and human beings:

There is potential for noise emanating from the machinery to impact on the community; however, this will be significantly mitigated by operations at the facility taking place indoors and the use of roller shutter doors. As demonstrated in sections 9 and 12 above, such impacts are considered not likely to be significant. In addition, if the activity is carried out in accordance with the RD and the conditions attached it will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

Based on the assessment carried out throughout this report, and the mitigation measures proposed (including the relevant conditions in the licence), I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects of the activity.

15. Reasoned Conclusion on Environmental Impact Assessment

Having regard to the impacts (and interactions) identified, described and assessed throughout this report, I consider that the mitigation measures proposed will enable the activity to operate without causing environmental pollution. I also consider that the potential impacts on the environment identified above, even if they occur, are unlikely to damage the environment, and the risk of them occurring is not unacceptable.

Accordingly, if the activity is carried out in accordance with the RD and the conditions attached, the operation of the activity will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

16. Appropriate Assessment

The nearest designated site to the facility is Cork Harbour SPA (site code 004030) located approximately 4.4km downstream from the facility. Any clean storm water discharged from the facility will enter the Lehenagh Beg Stream prior to entering the Tramore River (also known as the Douglas (Lee) River) which enters the Lough Mahon transitional waterbody. The first point of downstream waterbody contact with the SPA is when the river transitions to a transitional waterbody.

The Conservation Objectives for Cork Harbour SPA note that this SPA overlaps with Great Island Channel SAC (site code 001058) and that is the primary reason it has been included in this assessment. This SAC is approximately 11.4km downstream from the facility.

Appendix 1, Table 2 lists the European Sites assessed, their associated qualifying interests and conservation objectives. A map is also located in Appendix 1 indicating the relationship between the facility and the above referenced waterbodies and designated sites.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the proposed

activities, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Cork Harbour SPA (site code 004030) and Great Island Channel SAC (site code 001058).

The proposed activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the proposed activities, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the proposed activities was not required. The reasons for this determination are as follows:

- a) There are no point emissions to air, ground or groundwater from this facility;
- b) All storage and treatment activities take place indoors at the facility;
- c) Storm water from clean yard areas and potentially contaminated yard areas is segregated and discharged to surface water and sewer respectively;
- d) Clean storm water (rainwater run-off from non-process areas) is the only discharge to surface water from this facility;
- e) The nearest designated site Cork Harbour SPA which is located approx. 4.4km downstream of the facility and the Great Island Channel SAC located approx. 11.4km downstream of the facility are unlikely to be impacted by rainwater run-off from non-process areas of the facility.

17. Fit & Proper Person Assessment

The Fit & Proper Person test requires three elements of examination:

Technical Ability

The applicant has demonstrated the ability to operate a permitted waste facility at this location since December 2015 with an annual waste acceptance threshold of 49,999 tonnes per annum. Cork County Council has received one odour and vermin complaint in relation to the facility during this time period. The applicant has provided details of the technical knowledge and experience of key personnel in their current roles at the permitted waste facility. The responsibilities of these personnel form part of the facility's Environmental Manual. The licence application also includes information on the on-site management structure. It is considered that the applicant has demonstrated the technical knowledge required.

Legal Standing

Neither the applicant nor any relevant person has relevant convictions under the the Waste Management Act 1996 as amended, or under any other relevant environmental legislation.

Financial Provision

A Closure and Decommissioning Plan and ELRA were submitted with the application and were costed in accordance with the Agency's latest guidance. The applicant has proposed a total provision for the closure and decommissioning of the facility of \in 24,550 and a provision for the ELRA of \in 170,478. The applicant stated that the financial provision identified is relatively small due to the fact there will be no bulk storage of diesel or other hydrocarbons at the facility, most of the materials processed at the facility have a positive value and only small quantities of mixed dry recyclable waste are proposed to be stored prior to processing.

Condition 10.2.1 requires the revision of the closure and decommissioning plan within two months of the date of grant of the recommended licence. Condition 12.3.2 requires the revision of the ELRA within two months.

Condition 12.3.3 recommends that the licensee make financial provision to cover any liabilities associated with the operation.

<u>Fit & Proper</u>

It is my view that the applicant can be deemed a Fit & Proper Person for the purpose of this application.

18. Cross Office Consultation

In preparing this report and Recommended Decision, the following technical and sectoral advisors were consulted:

Consulted with:	Assistance Provided
Ms Jean Sayers Cork County Council	Confirmation of the compliance history of the facility with regard to its current waste facility permit.
Mr Joe Hunter OEE	Confirmation of the surrender of waste licence Reg. No. W0173-01.
Mr Stephen McCarthy and Ms Denise O'Riordan. OEE	ELRA, closure and decommissioning, and financial provision.
Ms Pamela McDonnell OES	Matters relating to Environmental Impact Assessment.
Ms Jennifer Cope OES	Irish Water's requirements regarding the emission to sewer.

19. Charges

The annual enforcement change recommended in the RD is \in 5,628.18, which reflects the anticipated enforcement effort required and the cost of monitoring.

20. Recommendation

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed

aplin **Caroline Murph**

Inspector

Procedural Note

In the event that no objections are received to the Proposed Decision of the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996, as amended.

Appendices

Appendix 1





(Red triangle).

European Sit	е	Cork Harbour SPA				
(site code):		(Site code 004030).				
Distance/ Direction facility:	from	Approx. 4.4km northeast downstream of the facility.				
Conservation objectives:	1	As per NPWS (2014) Heritage and the Gael	Conservation objectives: Cork Harbouracht (dated 16 Dec. 2014).	ir SPA 004030. '	Version 1. National Parks and	Wildlife Service, Department of Arts,
Qualifying in	terests	(* denotes a priority hal	pitat)			
Habitat: A999 Species:	Wetla	nds				
A004	Little	Grebe	Tachybaptus ruficollis	A141	Grey Plover	Pluvialis squatarola
A005	Great	Crested Grebe	Podiceps cristatus Phalacrocoray carbo	A142	Lapwing	Vanellus vanellus Calidris alnino alnino
A017 A028	Grev H	Heron	Ardea cinerea	A149 A156	Black-tailed Godwit	Limosa limosa
A048	Sheldi	uck	Tadorna tadorna	A157	Bar-tailed Godwit	Limosa lapponica
A050	Wigeo	n	Anas penelope	A160	Curlew	Numenius arquata
A052	Teal		Anas crecca	A162	Redshank	Tringa tetanus
A054	Pintail	il Anas acuta		A179	Black-headed Gull	Chroicocrphalus ridibundus
A056	Shove	eler Anas clypeata		A182	Common Gull	Larus canus
A069	Red-b	reasted Merganser	Mergus serrator	A183	Lesser Black-backed Gull	Larus fuscus
A130 A140	Golde	n plover	Haematopus ostralegus Pluvialis apricaria	A 193	Common tern	Sterna hirundo

Table 2:List of European Sites assessed, their associated qualifying interests and conservation objectives.

European Site (site code):	Great Island Channel SAC (Site code 001058).			
Distance/ Direction from facility:	Approx. 11.4km northeast downstream of the facility.			
Conservation objectives:	As per NPWS (2014) Conservation objectives: great Island Channel SAC 001058. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht (dated 6 June 2014).			
Qualifying interests	Qualifying interests (* denotes a priority habitat)			
Habitats:				
1140 Mudflats and sandflats not covered by seawater at low tide.				
1330 Atlantic salt mead	1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae).			

Appendix 2

Relevant European (and international) legal instruments

The following Irish and European instruments are regarded as relevant to this application assessment and have been considered in the drafting of the Recommended Decision.

Environmental Impact Assessment (EIA) Directive (85/337/EEC, as amended)		
Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)		
Water Framework Directive [2000/60/EC]		
Environmental Liability Directive (2004/35/CE)		
Waste Framework Directive (2008/98/EC)		
Groundwater Directive (80/68/EEC) and 2006/118/EC		
Energy Efficiency Directive.		

Appendix 3

List of Waste codes

'List of Waste' (LoW) Code	LoW Description, before treatment	Applicant's Description of Waste Accepted
15 01 01	Paper and cardboard packaging.	Household cardboard and paper waste.
15 01 02	Plastic packaging.	Household PET and HDPE bottles, clear film 90/10 and mixed film waste.
15 01 03	Wooden packaging.	Commercial wood and timber waste.
15 01 04	Metallic packaging.	Household aluminium metal and ferrous metal.
15 01 06	Mixed packaging.	Household and commercial mixed dry recyclable waste.
15 01 07	Glass packaging.	Commercial glass waste.
20 01 01	Separately collected paper and cardboard municipal waste.	Household paper waste.
20 03 01	Mixed municipal waste.	Household and commercial mixed dry recyclable waste.
20 01 38	Municipal waste. Separately collected fractions. Wood.	N/A
20 01 39	Municipal waste. Separately collected fractions. Plastics.	N/A