

# OFFICE OF CLIMATE, LICENSING & RESOURCE USE

	INSPECTOR'S REPORT ON A LICENCE APPLICATION	
то:	DIRECTORS	
FROM:	Ewa Babiarczyk ENVIRONMENTAL LICENSING PROGRAMME	
DATE:	8 May 2014	
RE:	Application for a review of a waste Licence from Waterford County Council for a facility at the Dungarvan Waste Disposal Site, Ballynamuck Middle, Dungarvan, County Waterford. Licence Register No. W0032-03.	

# 1 Application Details

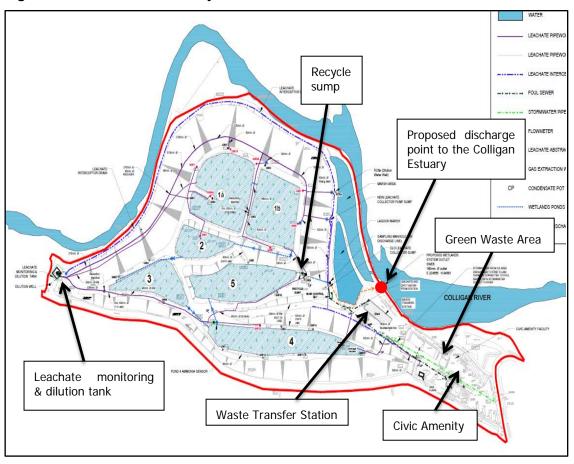
Licence application received:	23 January 2009.	
EIA Required:	No.	
Classes of Activity (P = principal activity):	3 <sup>rd</sup> Schedule: D4, D13, D15(P). 4 <sup>th</sup> Schedule: R3, R4, R5, R11 and R13.	
Third party submissions:	No submissions received.	
Site Notice check:	20 March 2009.	
Site Inspection:	15 May 2009, 25 July 2013, 6 May 2014.	

# 2 Applicant and facility

Applicant:	Waterford County Council	
Type of facility:	The facility comprises of a closed and capped landfill with a constructed wetlands system built on top of the landfill, waste transfer station, civic amenity site and green waste area. The constructed wetlands system treats landfill leachate and leachate generated in the waste transfer station and civic amenity. See below Figure 1 for the outline of the facility.	
Existing or new development	Existing site. Waste activities at the facility have been authorised under a waste licence since 29 November 2002.	
Main classes and quantifies of waste managed per annum:		

		tonnes • Garden waste 1,120 tonnes
Waste and/or processes:	activities treatment	Aftercare management of a closed landfill.  Treatment of leachate in the constructed wetlands system.  Abstraction of groundwater to provide leachate dilution.  Acceptance and storage of waste in the waste transfer station prior to transfer of this waste off site.  Storage and shredding of green waste in the green waste area.
		Acceptance of waste at the civic amenity.
Description of site:		The site is located approximately 2 km north west of Dungarvan on the southern bank of the Colligan River and sits on 8 Hectares of which the closed landfill covers an area of approximately 6.5 Ha. Land use in the vicinity of the site is primarily agricultural pastureland with some patches of cropland. An "angler path" with a public right of way runs along the site boundary adjacent to the river.
Reason for review	or licence	The applicant seeks authorisation of a discharge of treated landfill leachate from the constructed wetlands system to the adjacent waterbody, the Colligan Estuary.

Figure 1: Outline of the facility



# 3 Operational Description

The landfill at the site operated between the late 1960's and 2003. It is now capped and is being managed in the aftercare phase in accordance with the existing licence W0032-02.

The Waste Transfer Station accepts domestic household waste. All accepted waste is unloaded within the building where it is stored pending dispatch for recovery at composting facilities or disposal at a landfill.

The Civic Amenity is open to the public. Waste arriving in this area is inspected by staff prior to being left at the facility.

Until 2007 the Green Waste Area was utilised for composting of organic waste. At present, only green waste such as bushes, trees and grass are accepted in this area. A mobile shredder is brought onto the site once a month or whenever a sufficient amount of green waste for shredding has been accumulated. The shredded waste is dispatched for recovery at composting facilities.

#### Constructed Wetlands System

The main purpose of the constructed wetlands system is to treat the leachate generated at the landfill. The system is comprised of 6 ponds (Pond 1a, 1b, 2, 3, 4 and 5 – see Figure 1) to which diluted leachate is pumped for treatment. The leachate, after dilution, is pumped to Pond 1a and thereafter flows by gravity sequentially from pond to pond prior to discharge from the outlet of Pond 5.

Each pond has been planted with a variety of different plant species.

A leachate interceptor drain, comprising slotted HDPE pipes, laid in gravel runs along the northern boundary of the site directs any collected leachate towards a leachate sump from where the leachate is directed to the wetland ponds for treatment. Leachate from the old leachate drains and boreholes beneath the landfill, the leachate cut-off drain at the toe of Pond 4 and the waste transfer station are also directed to the wetland ponds for treatment. The wetland also treats effluent from the on-site septic tank, the first flush storm system in the civic amenity and the green waste area.

There is an ammonia sensor on the leachate sump that checks ammonia strength in the collected leachate and automatically calls for the pumping of dilution water if ammonia in leachate is above 100 mg/l. The dilution water is obtained, in preferential order,:

- from Pond 5 (i.e. the treated leachate),
- a well RC8a that is contaminated with leachate and
- clean groundwater from an on-site well near the leachate sump.

At the outlet of Pond 5, ammonia, conductivity and pH are continuously monitored. Currently the trigger level for ammonia is 5 mg/l. Exceedence of the trigger level activates recirculation of the treated leachate through the wetlands system.

The applicant stated that there will be no discharge from the wetland system in dry weather, only in heavy rainfall and when there is a good flow in the river. This is due in part to the facts that evapotranspiration from the wetland is high and wetland effluent is preferentially recirculated as dilution water for raw leachate.

Regarding the monitoring of parameters across the wetland ponds, monitoring results for metals show that even though the overall metal concentration significantly decreases through the system as a whole, there is an increase in metal concentration in Pond 4. **Condition 6.2.2** requires the investigation of this issue and requires the taking of measures to ensure that each pond is performing as it should.

#### 4 Emissions

#### 4.1 Air

Apart from the existing landfill gas flare, there are no point source emissions to air.

The main atmospheric emissions from the facility are dust and odour arising from the waste transfer station, civic amenity site and green waste area.

Dust generation at the facility is associated mainly with handling of waste and vehicle movement and shredding the green waste. Odour generation is associated with handling and temporary storage of putrescible waste.

In order to mitigate dust the applicant cleans and, in periods of dry weather, sprays hard-standing areas with water. Also, the loading and unloading of waste associated with the waste transfer station takes place in the station building. The applicant stated that there is an air handling unit of three overhead pipes which is connected to three extractor fans to ventilate the waste transfer station. However, as smell from the transfer building was detectable during the site visit on 25 July 2013, **Condition 3.31** requires the licensee to provide adequate measures for the control of odours and dust emissions from the facility which, as a minimum, shall include dust curtains, or equivalent, approved by the Agency on the entry/exit points from the waste transfer building and negative air pressure system for buildings where storage and/or processing putrescible waste takes place. The condition provides for the installation of a treatment system for odorous gases should this be necessary.

**Schedule B.1** sets emission limit values (ELVs) for the landfill gas flare and specifies an ambient dust deposition limit of 350 mg/m<sup>2</sup> per day. **Schedule C.8** requires monitoring of dust deposition on a monthly basis. **Condition 6.22** requires that all odour-forming waste stored overnight at the facility is removed from the facility within 48 hours of arrival or generation, with the exception of bank holidays when this waste shall be removed within 72 hours.

### 4.2 Emissions to Sewer

There is no connection to a public sewer at the facility.

#### 4.3 Emissions to Surface Waters

#### 4.3.1 Receiving waters

The proposed discharge from the wetlands system is to the Colligan Estuary (European TWB code: IE\_SE\_140\_0100) which is classified as transitional water. The Colligan River (IE\_SE\_17\_832) becomes a transitional water approximately 360 m upstream of the proposed discharge. Approximately 2 km upstream of the proposed discharge there is EPA monitoring station; Br nr Killadangan RS17C010250. The quality of water at this location was moderate in 2013. There is one tributary, Ballyconnery Upper (EPA code 17B53, no River Body Code), that joins the Colligan River at the landfill. Just after this confluence, the Colligan River becomes the transitional waterbody, the Colligan Estuary.

The Colligan Estuary is currently classified as a moderate ecological status transitional waterbody under the Water Framework Directive (WFD) and the overall objective for this waterbody is to be restored by 2015. The WFD *Full Report for the Waterbody Colligan Estuary* states that morphological point risk sources and point risk sources such as WWTPs and combined sewer overflows (CSOs) are factors having the potential to impact on the transitional waterbody quality. No names or locations of the WWTPs and CSOs are given in the WFD report.

There are no WWTPs upstream of the proposed discharge point. There is one UWWTP operated by Waterford County Council for Irish Water that serves Dungarvan agglomeration (Licence Reg. D0017-01). The nearest discharge point from this plant is to the Colligan Estuary approximately 2 km downstream from the site. It is not expected that said licensed WWTP could have a negative impact on the water quality in the Colligan Estuary when operated in accordance with licence conditions. In respect of the discharges from CSOs, it lies within the remit of the Irish Water to ensure that the discharges do not impact on the receiving water quality.

Approximately 4.4 km away from the proposed discharge, Dungarvan Harbour is a designated shellfish area.

## 4.3.2 Quality of the treated effluent

The monitoring results submitted by the applicant in the Annual Environmental Report 2012 demonstrate that, overall, the wetlands system is capable of improving the quality of the treated effluent. Figure 2 shows levels of ammonia across the wetland ponds.

140 120 12-Jan 100 80 15-Feb 60 40 23-Jul 20 0 12-Sep Pond 1 Pond 2 Pond 3 Pond 4 Pond 5 Pond 5 05-Oct (inlet) (inlet) (inlet) (inlet) (inlet) (outlet)

Figure 2: Levels of Total Ammonia (as N) [mg/l] in the ponds and outlet.

Also the applicant's monitoring results for aluminium, arsenic, cadmium, chromium, iron, mercury, manganese, nickel, lead, antimony, selenium, boron, copper and sodium metals across the ponds show that the wetland system is capable of a significant reduction in metal concentrations. The available data, however, does not indicate whether there is absorption or dilution of the metals in the wetlands because the level of dilution of leachate is not recorded. The extensive monitoring required in the RD will address this gap in available knowledge on how the system works.

#### 4.3.3 Impact of the proposed discharge

Assimilative capacity calculations, as summarised in Table 1 below, were made in order to examine the impact of the proposed discharge on the receiving water. The calculated figures are based on:

- the maximum volume of 186 m³/day (0.002 m³/s) which is proposed to be discharged from the wetlands,
- the 95%ile flow rate in the Collinagh River located approximately 360m upstream of the proposed discharge estimated, in absence of flow monitoring data available for the Colligan River, using the OEA hydrotool model at 0.416 m<sup>3</sup>/s and
- the average background concentrations for BOD, Orthophosphate (as P) and Total Ammonia (as N) based on the sampling at the EPA monitoring station Br nr Killadangan (RS17C010250) located approximately 2 km upstream of the proposed discharge.

**Table 1 Assimilative Capacity** 

Parameter	Average background Concentration (mg/l)	% Available Capacity	Proposed ELVs	Contribution from discharge (mg/l)	Predicted downstream concentration (mg/l)	Relevant standard (mg/l) Note 1
BOD	0.790	69.62	25	0.116	0.906	≤2.6
Orthophos phate (as P)	0.013	82.67	0.5	0.002	0.015	≤0.075
Total Ammonia (as N)	0.015	89.29	1	0.005	0.020	≤0.140

**Note 1:** Good status water quality standards as specified in the European Communities Environmental Objectives (Surface waters) Regulations 2009, as amended.

The calculations show that, in respect of BOD, Orthophosphate and Total Ammonia, at a flow of 0.416 m³/s in the receiving water there is capacity to assimilate the discharge from the wetlands system. No monitoring results were available for suspended solids in the receiving water. However, the applicant stated that the wetland is designed to achieve concentration of 25 mg/l for this parameter, which is below the limit for suspended solids set in the Urban Waste Water Treatment Regulations (35 mg/l). Accordingly, it is proposed in the RD to set the ELV for suspended solids at 25 mg/l.

In respect of metals in the treated leachate, Table 2 includes dilution calculations for metals in the proposed discharge and shows that the predicted downstream concentration as a result of the proposed emission limit values is significantly lower than any relevant standard. The calculations presume zero concentration of the metals in the river. Comparable data from other rivers shows that metals will be present in very low concentrations and are often lower than the limit of detection.

Table 2 Discharge of heavy metals

Parameter μg/l	Concentration at outlet of Pond 5 µg/I	Proposed ELVs μg/l	Max disch. volume m³/s	95% flow in the Colligan River m <sup>3</sup> /s	Predicted downstream quality	Relev stand µg <b>Not</b> e	ards /I
Arsenic	1.2	6	0.002	0.416	0.029	20	40
Cadmium	0.1	0.5	0.002	0.416	0.002	0.2	5
Chromium	1.1	5.5	0.002	0.416	0.026	0.6	30
Copper	0.013	0.065	0.002	0.416	0.000	5	10
Lead	1.5	7.5	0.002	0.416	0.036	7.2	20
Nickel	3.9	19.5	0.002	0.416	0.093	20	50
Mercury	0.02	0.1	0.002	0.416	0.000	0.05	0.4

**Note 1:** Left column, Good status water quality standards as specified in the European Communities Environmental Objectives (Surface waters) Regulations 2009, as amended.

**Note 2:** Right column, Good status water quality standards as specified in the European Communities (Quality of Shellfish Waters) Regulations 2006, as amended.

The above calculations show that even with a very small dilution of 0.416 m<sup>3</sup>/s the concentrations of metal will be significantly under any relevant standards. The Dungarvan Harbour shellfish area is 4.4 km downstream of the proposed discharge and the dilution in the Harbour will be far greater than at the discharge point.

The ELVs as set as a result of the calculations aim at ensuring a high level of protection for the receiving waterbody. **Schedule B.2** reflects the results of the calculations and sets ELVs for the proposed discharge.

#### 4.4 Storm Water Runoff

The surface water system in the civic amenity area consist of a series of gullies, grilles and pipes. Surface water from the civic amenity area is collected through the gullies and passes through the oil interceptor prior to discharge into the Colligan River.

Surface water collected from the green waste acceptance area is connected to the leachate treatment system (the wetland) for the landfill.

Surface water run-off from the landfill side slopes will be collected by the surface water carrier drains at the bottom of the slopes and discharged directly into the Colligan River/Estuary.

#### 4.5 Emissions to ground/groundwater

The landfill is unlined hence there is potential for the landfill leachate infiltration into groundwater. The capping reduces the infiltration of rainfall into the landfill which reduces the quantity of leachate generated. Also, a leachate abstraction system which pumps leachate into the constructed wetland system minimises the potential for leachate infiltration into groundwater.

The applicant has confirmed that treated leachate has been allowed to discharge from the wetland system to an unlined lagoon (see figure 1) located between the landfill and the Colligan Estuary. It is not clear whether this discharge represents a discharge to groundwater (through the underlying gravels in the lagoon) or a discharge to the river (through the earthen embankment that forms the sidewall of the lagoon). The applicant maintains the latter although no evidence was provided to support the claim. **Condition 6.16.1** requires the licensee shall carry out a risk screening and where necessary a technical assessment in accordance with the Guidance on the Authorisation of Discharges to Groundwater.

**Condition 6.16.2** requires the licensee to submit, for the Agency's agreement, groundwater monitoring trigger levels that will indicate any significant change in groundwater quality. **Schedule C.6** specifies monitoring requirements for groundwater.

# 4.5.1 Groundwater quality and monitoring

Groundwater beneath the facility is polluted due to historical contamination by leachate generated at the unlined landfill and also tidal (saline) intrusion from the estuary. The concentrations of parameters in the ground water beneath the site fluctuate. For example, the EPA groundwater monitoring results contained in AERs 2008 and 2012 show that, out of five monitoring locations, the concentrations of Ammonia, Chloride and Potassium were higher than in 2008. The Conductivity was higher at two locations, and Dissolved Oxygen and Iron were higher at three monitoring locations.

The OEA stated that all leachate monitoring locations at the facility have been dry for at least the last 4 years and the only location where a sample can be obtain is the leachate interceptor drain which directs the collected leachate towards the leachate sump where it is pumped to the wetlands system. The samples from this drain appear to contain surface water runoff. The monitoring results obtained from OEA for 2010 to 2013 show that concentration of parameters in leachate varies. Out of four monitoring results the highest concentration of Ammonia (as N) was recorded in 2011 at a level of 59 mg/l. However, in 2013 Ammonia concentration was 0.11 mg/l. Out of three monitoring results available for BOD, the highest concentration was recorded in 2012 at 104 mg/l and the lowest, recorded in 2013 was at 1.9 mg/l.

## 4.5.2 Dungarvan Water Supply

The facility is located 500m to the east of the main Dungarvan water supply source at Ballynamuck and approximately 200m to the west of the zone of contribution of the Ballynamuck well field as shown in the Geological Survey of Ireland's 'Dungarvan Public Supply - Groundwater Source Protection Zones, 1998'. According to this document, the source of the Dungarvan water supply at Ballynamuck is an excellent yielding well which is located in a regionally important karstic limestone aquifer and the area around the supply is stated to be moderately to extremely vulnerable to contamination.

#### 4.6 Wastes Generated

There are no substantial wastes generated at the facility.

#### 4.7 Noise

Noise emissions at the site are caused by vehicles bringing waste to and from the waste transfer station, collection of waste containers from the civic amenity and the

mobile shredder for green waste which is brought to the site once a month. There are no recorded noise complaints in relation to the facility.

**Schedule B.4** includes noise limits and **Condition 6.17** requires an annual noise survey to be carried out in accordance with the Agency guidance document NG4.

#### 4.8 Nuisance

Waste loading, unloading and storage occur within the waste transfer station building. **Condition 6.24** requires that the licensee shall daily inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours and that a record of all nuisance inspections shall be maintained. **Condition 6.21** of the RD specifies litter control measures.

#### 5 Use of Resources

The main raw material used on site is water for cleaning the hard standing areas within the facility. **Condition 7.3** requires the licensee to identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives.

Diesel is used to run the shredder however this in not permanently on site. The fuel usage is approximately 150 litres/day.

Electricity is used for lighting, operation of the weighbridge and in the office and garage buildings. The estimated annual electricity consumption is 14,200 (kWh).

#### 6 Restoration

**Condition 10.2.1** of the RD requires the licensee to maintain a detailed and costed plan for the decommissioning or closure of the site or part thereof.

## 7 Waste Management, Air Quality and Water Quality Management Plans

Dungarvan Harbour Pollution Reduction Programme 2009 for the shellfish growing waters at Dungarvan Harbour has been established in order to protect and improve water quality in the designated shellfish growing areas in Dungarvan Harbour and, in particular, to ensure compliance with the standards and objectives for these waters established by the 2006 Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) and with Article 5 of Directive 2006/113/EC of the European parliament and of the Council on the quality required for shellfish waters. The pollution reduction programme lists urban wastewater systems, on-site waste water treatment systems from dwellings, Section 4 discharges and agriculture as key pressures on the designated shellfish water.

# 8 Compliance with Directives/Regulations

Requirement	Assessment
Landfill Directive	The facility is not subject to the Landfill Directive.
Water Framework Directive [2000/60/EC]	See Section 4.3 and 4.5 above for more detail.
European Communities Environmental Objectives	See Section 4.3 above for more detail.

(Surface Water) Regulations, S.I. No. 272 of 2009, as amended.	
European Communities Environmental Objectives (Groundwater) Regulations, S.I. No. 9 of 2010, as amended.	See section 4.5 above for more detail.
Environmental Liabilities Directive (2004/35/EC)	Condition 12.2.2 requires that an Environmental Liabilities Risk Assessment (ELRA) is submitted to the Agency within twelve months of grant of the licence.
	<b>Condition 12.2.3</b> of the RD requires the applicant to make adequate financial provision to cover any liabilities associated with the activity prior to commencement of activities.
Waste Framework Directive	The RD ensures compliance with the Directive for the following reasons:
	It will allow for more waste to move up the waste hierarchy as it increases the recycling of biodegradable and other recoverable waste that might otherwise have been disposed of by landfill.
	The State is obliged to take appropriate measures to establish an integrated network of installations for the recovery of waste collected from private households and from other waste producers. The facility will contribute to this overall national objective.
	It will contribute towards the general development of a sustainable and self-sufficient approach to the management of waste in accordance with the proximity principle.
Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)	See Section 11 of this report.

# 9 Environmental Impact Assessment Directive (85/337/EEC)

An Environmental Impact Statement (EIS) was not submitted with the application. The licence application is for a project that is below the thresholds stipulated in Schedule 5 of the Planning and Development Regulations, 2001, as amended.

# 10 Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)

There are designated sites under Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC) in the proximity of the facility.

The proposed emission to surface water is into the Dungarvan Harbour SPA (site code 004032). Other protection areas located in 10 km of the facility include:

- Helvic Head to Ballyquinn SPA (site code: 4192)
- Mid-Waterford Coast SPA (site code: 4193)
- Helvic Head SAC (site code: 665)
- Comeragh Mountains SAC (site code: 1952)
- Blackwater River (Cork/Waterford) SAC (site code: 2170)
- Glendine Wood SAC (site code: 2324).

These other sites, however, will not be subjected to impacts from the facility, due to the nature of their conservation objectives and/or direct lack of connectivity to the facility. Therefore, it is not expected that emissions from the facility could impact these sites.

Dungarvan Harbour SPA (site code: 4032) covers an area of 2094.29 ha and is a large east-facing bay, sheltered on the south by Helvick Head and Ballynacourty Point to the north. A narrow north-south shingle spit, which almost divides the bay in two, provides very sheltered conditions for the inner part of the site. The bay is essentially the estuaries of three main rivers, the Brickey, the Colligan and the Glendine. At low tide, very extensive intertidal sand and mud flats are exposed. Salt marshes often fringe the intertidal flats, especially in the more sheltered areas. The site includes a substantial area of shallow marine water in outer Dungarvan Harbour.

The site is of major conservation significance for the large numbers of many species of waterfowl that use it. The site regularly holds over 20,000 waterfowl and this qualifies the site as of International Importance. Two species that occur in important numbers are listed on Annex I of the E.U. Birds Directive, i.e. Bar-tailed Godwit and Golden Plover. The site provides high quality feeding areas and good roost sites. At high tides, roosts outside of the site area are also used. Overall, this is the most important site for waterfowl in County Waterford and is one of the most important in the region.

The following table lists the qualifying interests for which the site has been designated and the conservation objectives:

#### Wintering Species

- Great Crested Grebe *Podiceps* cristatus
- Light-bellied Brent Goose Branta bernicla hrota
- Shelduck *Tadorna tadorna*
- Red-breasted Merganser *Mergus* serrator
- Oystercatcher *Haematopus* ostralegus
- Golden Plover Pluvialis apricaria
- Grey Plover *Pluvialis squatarola*
- Lapwing *Vanellus vanellus*
- Knot *Calidris canutus*
- Dunlin Calidris alpina

#### Conservation objectives

To maintain the favourable conservation condition of the bird species listed as Qualifying Interests in Dungarvan Harbour SPA, which is defined by the following attributes and targets:

- Population trend: Long term population trend stable or increasing.
- Distribution: There should be no significant decrease in the numbers or range of areas used by waterbird species, other than

<ul> <li>Black-tailed Godwit Limosa limosa</li> <li>Bar-tailed Godwit Limosa lapponica</li> <li>Curlew Numenius arquata</li> <li>Redshank Tringa totanus</li> <li>Turnstone Arenaria interpres</li> </ul>	that occurring from natural patterns of variation.
Habitat	
• Wetlands	To maintain the favourable conservation condition of the wetland habitat in Dungarvan Harbour SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. This is defined by the following target:  • The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,219ha, other than that occurring from natural patterns of variation.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on the European Site(s).

The screening assessment undertaken demonstrates that the activity is likely to have significant effects, in terms of maintaining favourable conservation status of the qualifying interests, on the European Site(s) having regard to its conservation objectives.

The Agency determined that an Appropriate Assessment was required and notice of that determination was given to the applicant (Article 14(2)(b)(ii) notice dated 30/09/2013). The applicant was required to submit a Natura Impact Statement, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011).

The Appropriate Assessment demonstrates that the activity will not adversely affect the integrity of the European Site(s) subject to the mitigation measures proposed.

#### The reasons are:

- The RD applies emission limit values (ELV's) to the discharge from the facility's wetland system to surface waters so that surface water quality standards will not be exceeded and favourable conditions for the qualifying interests of the Dungarvan Harbour SPA (site code: 4032) will be maintained.
- The RD includes measures for protection of shellfish.
- The RD applies measures for control and effective operation of the wetland system and the remaining part of the facility.

In accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), pursuant to Article 6(3) of the Habitats Directive, the activity will not adversely affect the integrity, in terms of maintaining

favourable conservation status of the qualifying interests of the European Site(s), having regard to its conservation objectives.

#### 11 Cross Office Liaison

In preparing this report and Recommended Decision I have consulted Mr. Damien Masterson (OEE) on issues regarding complaints, enforcement actions and the proposed discharge to the Colligan waterbody. I also contacted Ms. Jean Smith, Mr. Diarmuid Berry and Ms. Rebecca Quinn of the Office of Environmental Assessment (OEA) in relation to the leachate monitoring and the flow of water in the Colligan River.

#### 12 Best Available Techniques (BAT)

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.

# 13 Complaints and Compliance Record

There have been no complaints received in respect of the facility for several years. Also, there are no significant open enforcement actions in relation to the facility.

#### 14 Fit & Proper Person Assessment

Waterford County Council has never been convicted of any relevant offence.

The Council stated that it has experience in waste management and in operating licensed facilities.

Accordingly, the legal and technical standing of the applicant qualifies the applicant to be considered Fit and Proper Persons.

## 15 Proposed Decision

The RD if granted will authorise:

- discharge of the treated landfill leachate and treated foul effluent from the rest of the site to the Colligan Esutary,
- acceptance of 10,400 tonnes per annum of municipal waste at the waste transfer station and civic amenity, and 1,120 tonnes per annum of garden waste at the civic amenity and green area.

The RD includes a wide range of conditions that will ensure protection of off-site surface water and proper handling of waste. Overall, I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of activities in accordance with the conditions will not cause environmental pollution.

#### 16 Submissions

No submissions were received in relation to the licence application.

# 17 Charges

The annual charge proposed in the RD is €14,433 which is equivalent to the OEE charge for 2013.

# 18 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 PD and for the reasons as drafted.

Signed

Ewa Babiarczyk Inspector

#### **Procedural Note**

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