

# OFFICE OF LICENSING & GUIDANCE

INSPECTORS REPORT ON A LICENCE APPLICATION			
То:	SUB BOARD		
From:	PERNILLE HERMANSEN	- LICENSING UNIT	
Date:	30/11/05		
RE:	APPLICATION FOR A WASTE LICENCE FROM DONEGAL COUNTY COUNCIL, LICENCE REGISTER 215-1		

Application Details			
Type of facility:	Landfill		
Class(es) of Activity ( <b>P</b> = principa activity):	3 <sup>rd</sup> Schedule: 1, 4, <b>5</b> , 6 and 13 4 <sup>th</sup> Schedule: 2, 3, 4 and 13		
Quantity of waste managed per annum:	25,500 tonnes		
Classes of Waste:	Household waste, commercial waste, construction and demolition waste and industrial non-hazardous solids		
Location of facility:	Meenaboll Landfill Site, Meenaboll, Letterkenny, County Donegal.		
Licence application received:	22/12/04		
Third Party submissions:	Nine		
EIS Required:	Yes		
Article 14 Notices sent:	2/08/05		
Article 14 compliance date:	12/10/05		
Article 16 Notices sent:	2/08/05		
Article 16 Compliance date:	12/10/05		
Site Inspection:	Site notice inspection on 21/3/05 by PH – non-compliant. 15/8/05 site notice compliant.		

# 1. Facility

Donegal County Council (DCC) has applied for a waste licence for a new landfill facility at a greenfield site located at Meenaboll, Letterkenny, County Donegal. The facility will consist of a landfill and a civic waste facility (CWF).

The area of the facility comprises 14.5 hectares of which the proposed landfill covers about 4.5 hectares. It will contain 5 phases comprising 8 cells with a lifetime span of 20 years and with an annual waste intake of 24,000 tonnes per annum. The overall proposed capacity of the landfill is 500,000m<sup>3</sup>.

The proposed landfill will be contained with a composite lining system and a permanent capping system with a gas collection layer and flaring system in accordance with the Landfill Directive (1999/31/EC). The applicant proposes installation of associated infrastructure such as a stormwater management system including stormwater settling ponds and constructed wetlands.

The site is located on Meenaboll Hill which forms part of the Glendowan Mountains, a remote area to the southwest of Letterkenny (about 17km). Within and around the site the main habitat is conifer plantation. There are a total of 5 residential properties within 2-3 km of the facility with the closest occupied house being more than 2 km away.

The proposed site is drained by the Sruhanpollandoo stream which discharges into the Cummirk River and is within the River Finn cathcment. The River Finn is a designated Salmonid Water Course under the Fresh Water Fish Directive (78/659/EEC). The boundaries of four designated nature conservation areas (NHA and SAC) are within close proximity (about 0.5 to 3 km) of the proposed facility.

Hours of Operation8:00 to 18:00 Monday to Friday inclusive<br/>9:00 to 14:00 SaturdayHours of Waste<br/>Acceptance8:30 to 17:00 Monday to Friday inclusive<br/>9:00 to 13:00 Saturday

The applicant has proposed the following hours for the facility.

The RD allows for these hours as set out in Condition 1, however the RD extends the hours for the proposed civic waste facility to assist the local community (Condition 1). The RD also allows for operation of the civic waste facility on Sundays by agreement.

# 2. Operational Description

Condition 8 of the RD stipulates that only pre-treated wastes are acceptable for disposal as set out in Article 6 (a) of the Landfill Directive.

In the Article 14 reply received on 31/05/05, the applicant has proposed the acceptance of 25,500 tpa consisting of household waste (18,500 tpa), commercial waste (4,000 tpa), construction and demolition waste (500 tpa) and industrial non-hazardous solids (2,500 tpa). The RD allows for this (Schedule A).

The RD allows for the acceptance of 1,500 tpa of household waste at the proposed civic waste facility. The applicant proposes to accept various dry recyclables such as glass, paper, cardboard, cans, plastics as well as green waste, WEEE and other household hazardous waste such as waste oils, paint, batteries at the proposed CWF.

The installation of infrastructure at the facility is controlled by Condition 3 and Schedule D of the recommended decision.

# 3. Use of Resources

The applicant proposes to strip all the peat and boulder clay from the surface to the insitu rock level or below to proposed formation levels. The excavated peat will be stored on site and if suitable used for landscaping operations. The boulder clay will be used for earthworks at the landfill such as perimeter bunds. The excavated rock will be used as aggregate at the facility and thereby minimising need for import of construction materials to the site.

The nearest three-phase power supply is located over 4 km away and to provide electricity to the site would require erection of pylons. To avoid this the applicant proposes the installation of an on-site 100kW/h diesel generator. To ensure efficient operation and avoid any significant environmental pollution from the diesel generator, a regular maintenance programme is required (Conditions 2 and 6).

# 4. Emissions

# <u>4.1 Air</u>

The main emission to air from the facility will be landfill gas. The applicant proposes to collect and initially vent the landfill gas to atmosphere. A landfill gas flare is proposed to be installed with the first phase of the restoration works with an estimated date of commencement of flaring set as 2008. The RD sets out that the flare shall be installed and maintained at the landfill within twelve months of the final cap being installed at Phase 1 (Condition 3). Final capping shall be installed twenty four months after filling has reached the required level in Phase 1 (Condition 10).

Schedule C sets the control and monitoring requirements for landfill gas. The trigger levels for landfill gas are set out in Condition 6 of the RD. The landfill gas concentration limit values in buildings are set out in Schedule B of the RD.

With the nearest residence more than 2 km away odour nuisance is not considered to be significant even during prevailing winds.

# 4.2 Emissions to Sewer

There will be no direct emission to sewer at the facility. The applicant proposes to discharge the sanitary effluent generated in the administration building to a proprietary wastewater treatment system with the effluent discharged to the leachate holding tank (Condition 3). Furthermore stormwater runoff from the waste storage area at the civic waste facility and waste inspection/quarantine areas and effluent from the wheelwash will be discharged to the leachate holding tank as proposed by the applicant (Condition 3).

#### Leachate removal

The applicant estimates that the annual rainfall in the area is about 1600mm/year with these high rainfall figures it is important to provide an effective leahcate management system at the facility. The applicant has submitted water balance calculation showing the leachate quantities varying over the operational period from 13,200 m<sup>3</sup> to 5,700 m<sup>3</sup> per annum with post closure leachate generation estimated to 2,200 m<sup>3</sup> per annum. The applicant has designed the landfill with small cells to ensure minimisation of leachate generated.

The leachate will discharge to storage tanks partially below ground with a total depth of 4m only 2m will be above ground with a storage capacity of 1,500m<sup>3</sup>. The applicant proposes to either treat the leachate with a surface or diffused air aeration system followed by settlement operated on a batch system. The RD allows for treatment of leachate to be carried out at the facility (Condition 6).

The RD allows for the treated leachate to be discharged to an agreed sewage treatment works (Condition 5) or to be recirculated at the facility (Condition 6). The extent of the recirculation will be site specific and based on ongoing monitoring and assessment of the process.

# 4.3 Emissions to Surface Waters

The Sruhanpollandoo stream flows in a north-westerly direction through the site. About 100m downstream of the proposed site the stream is described as being 15-20cm wide and 5-30cm deep with fast flowing water over a substrate which is heavily silted and orange coloured (characteristic of iron feeding bacteria). The Sruhanpollandoo stream confluence with Cummirk River about 3km downstream of the facility. The Cummirk River discharges into the River Finn which is a designated Salmonid Water Course under the European Communities (Quality of Salmonid Waters) Regulations of 1988 (S.I. No. 293 of 1988).

The applicant states that the proposed site has been strategically located to ensure that the landfill is not located within the Gartan catchment which is an important drinking water source in the area of the proposed landfill. The Sruhanpollandoo stream and downstream watercourses are not used as drinking water supplies.

The biological assessment of the water quality indicates that the Shruhanpollandoo stream is slightly polluted with a Q value of Q4 downstream of the proposed facility. The applicant has submitted chemical water monitoring results showing that the surface water of the Shruhanpollando stream was generally of good quality. The applicant states that the stream may be subject to episodic elevated nutrient levels (nitrates, nitrites and phosphates) arising from forestry plantations.

Condition 3 of the RD allows for the surface water management network to be installed prior to any other construction works commencing at the facility as proposed by the applicant. The proposal comprises a stormwater drainage network installed around the perimeter of the proposed landfill with stormwater discharging to settlement lagoons and a constructed wetlands prior to discharge to the Sruhanpollandoo stream. The stream will be culverted through the proposed site (but not passing under the landfill footprint). Stormwater from the site roads will discharge to an oil interceptor prior to discharge to the settlement lagoons and the wetlands. Furthermore groundwater intercepted below the landfill by the groundwater drainage blanket will be discharged to the settlement lagoons and constructed wetlands prior to discharge to the settlement lagoons and constructed wetlands prior to discharge to the settlement lagoons and constructed wetlands prior to discharge to the settlement lagoons and constructed wetlands prior to discharge to the settlement lagoons and constructed wetlands prior to discharge to the settlement lagoons and constructed wetlands prior to discharge to the existing watercourse (Condition 3).

To ensure protection from potential polluted stormwater/groundwater entering the Sruhanpollandoo stream, the RD request that a telemetry monitoring system be installed at the facility prior to commencement of waste disposal activities. Condition 6 of the RD requires that the flow, water levels and water quality be continuously monitored. Condition 5 of the RD stipulates that the applicant submits criteria/trigger levels for agreement with the Agency which will determine when the outlet from the surface water settlement lagoons will be closed. Furthermore the applicant has to ensure that the settlement lagoons and the constructed wetlands have been designed to

include the necessary flow control, sizing and retention options to achieve the specified emission standards as set out in Schedule B.

Schedule B of the RD sets ELVs that have to be met at the discharge point (i.e. predilution), as the flow from the proposed facility may constitute a substantive amount of flow to the stream. The ELV for suspended solids is in accordance with the salmonid standards of the European Communities (Quality of Salmonid Waters) Regulations (S.I. No 293 of 1988). The ELV parameter for ammonia is non-ionised ammonia as research has shown that non-ionised ammonia is the species of ammonia which is most harmful to freshwater aquatic life and to game fish, in particular. The salmonid standard for non-ionised ammonia is 0.02 mg/l NH<sub>3</sub>. However the value of 0.02 mg/l NH<sub>3</sub> is a long-term toxic effect level for both salmonid and cyprinid fish, whereas lethal levels are ten times greater. The RD sets the ELV for non-ionised ammonia at 0.04 mg/l NH<sub>3</sub> taking into consideration the natural elevation stemming most likely from forestry. The ELVs for dissolved oxygen, chloride and sulphate takes into consideration the background levels measured at the facility.

# 4.4 Emissions to ground/groundwater:

The proposed site is underlain by metamorphic rocks assigned to the Upper Falcaragh Pelite Formation. The formation with an overall thickness of 600m is described as a stratified sequence of dark grey politic schist (metamorphosed mudstone), with beds of paler semi-pelitic schist (metamorphosed sandstone). Investigations recorded depth to bedrock varies across the site from 1.5m to 9.8m, with a mean depth of 3.5m recorded in the vicinity of the proposed landfill. The bedrock is mantled by a lower horizon of boulder clay and an upper peat layer.

Investigations at the site have shown that the shallow rockhead was highly fractured and in a slight to moderately weathered state to depths ranging from 0.5 to 2m below the rock surface. Below this the competency of the rock increases with depth. Condition 3 sets the formation levels for the landfill cells allowing for excavation into the rockhead to more competent rock.

The groundwater vulnerability rating is classified as Extreme (E) based on the design of the landfill which would include the removal of overburden cover and excavation into rockhead. The aquifer is classified by GSI as being a "Poor and generally unproductive aquifer". The combination of the groundwater vulnerability and the resource protection ratings give the rating code  $R2^1$  resulting in the site being considered suitable for the development of a landfill site subject to guidance in the Agency's publication *Landfill Manual Landfill Site Design* or the conditions of a waste licence.

The applicant has proposed to install a composite lining system on top of the groundwater drainage blanket at the base of the landfill. Condition 3 of the RD allows for the use of a 0.5m Bentonite Enhanced Soil (BES) with a hydraulic conductivity of  $1 \times 10^{-10} \text{ m}^3/\text{m}^2/\text{s}$  as part of the proposed lining system. This design solution provides a superior level of leakage control to the 1 m clay with hydraulic conductivity of  $1 \times 10^{-9} \text{ m}^3/\text{m}^2/\text{s}$  as set out in the Agency's publication *Landfill Manual Landfill Site Design*.

The groundwater flow at the facility is in a northwest direction. The applicant has monitored the groundwater at the facility both at the landfill area as well as upgradient and downgradient of the landfill area. Concentrations of manganese and iron were above permissible drinking water standard which can be contributed to the geology of the underlying bedrock. The applicant does not offer any explanation for slightly elevated Total Phenol (0.55 mg/l) at a downgradient borehole (BH9).

The applicant is required to monitor the quality of the groundwater intercepted in the groundwater drainage layer (described in Section 4.3) as part of the telemetry system prior to groundwater being discharged to the lagoons and constructed wetlands (Condition 6).

The nearest groundwater abstraction to the proposed facility is located 3 km to the south west in a sub catchment of the River Finn separate from the landfill sub-catchment. According to the applicant the proposed landfill development will not impact on this supply.

# 4.5 Noise:

Noise monitoring was carried out at the facility at six locations in September 2002. The day time noise levels vary from 31.5 to 36.6 dB  $L_{Aeq}$  and the night time noise levels vary from 30.8 to 33.3 dB  $L_{Aeq}$ .

The noise emission level at the nearest residences from landfilling is estimated to be 34 dB  $L_{Aeq}$ . The impact of construction works on the nearest residential dwellings is predicted to be 39 to 44 dB  $L_{Aeq}$ . Construction noise will be mitigated by screening and good working practice.

The RD requires that noise emission is measured at the three boundary locations and any specified noise sensitive locations (Schedule C). Schedule B sets the noise emission limit value to be measured at any noise sensitive locations.

## 4.6 Nuisance:

Potential nuisances at the facility are controlled by Condition 6 of the RD.

Dust monitoring was carried out at one location at the site in August 2003 with 10  $mg/m^2/day$  dust deposition. With the nearest dwelling over 2 km away from the proposed site the impact of dust is considered to be insignificant.

Schedule B sets out the dust deposition rates and Schedule C list the monitoring requirements for dust monitoring.

# 5. Restoration/Landscaping

The applicant shall submit a Closure, Restoration & Aftercare Management Plan prior to waste disposal activity at the site (Condition 10). Condition 10 sets out the finished (post settlement restored) levels of the landfill. Furthermore Condition 10 of the RD requires that filled cells are permanently capped within twenty four months of the cells having been filled to the required level.

The applicant proposes to construct 3m high earth bunds along the local road and behind the gas flare and 2m high bunds around the remainder of the site. The bunds will be graded to create a natural profile and planted with native trees and shrubs to help screen future workings and site activities. Filling will start in the lower cells allowing the perimeter planting to develop before works commence on the higher potentially more visible parts of the site. The RD stipulates that the Construction Plan for cell development shall have regard to the sequencing necessary to provide short, medium and long term visual and acoustic screening of the operational areas (Condition 3).

# 6. Cultural Heritage, Habitats & Protected Species

There are no known archaeological sites within the townland of Meenabol. Condition 11 requires that prior to development of any undisturbed area, the advice of the Heritage Section of the DoEHLG is sought.

The applicant has identified 5 designated conservation areas (4 SAC/NHA and 1 SPA) within 5km of the proposed facility. The SACs are designated for the protection of mainly upland and montane habitats including blanket bog, lakes and rivers. A letter was issued on 2/08/05 to Development Applications Unit of the DoEHLG inviting National Parks & Wildlife Services to express their view on the proposed development. The Service has communicated that they have no comments in relation to the nature conservation areas pertaining to the proposed development.

The closest designated area of conservation is *Cloghernagore Bog & Glenveagh National Park* (SAC and NHA) located within 0.66km of the proposed facility boundary. The main tourist attractions in the park, Glenveagh National Park Visitor Centre and Glenveagh Castle are located 14km and 11.6km northwest of the proposed facility respectively.

The River Finn is located 2.25km from the proposed facility boundary and is a Designated Salmonid Water, SAC and NHA (note Shruhanpollandoo stream confluence with the Cummirk River about 3km downstream of the facility). The applicant states in the EIS submitted with the application that the design of the surface water management system will consider the need to minimise adverse impact on the designated conservation areas (see Section 4.3).

The applicant carried out a fauna survey identifying a number of sensitive bird species of conservation importance in the study area including Hen Harrier, Red Grouse and Golden Plover. In the Article 14 reply submitted on 31/08/05 the applicant details that there is no record of Hen Harrier breeding at the proposed site or in the proximity of the site. The Golden Plover and Red Grouse were recorded on open moorland habitat within 1 to 2 km of the proposed facility. The applicant states that landscaping measures such as retention of tall trees and bunding (see Section 5) will screen these species from visual and aural disturbance of the proposed site and associated activities.

# 7. Waste Management Plan

The Waste Management Plan for Donegal adopted by DCC in October 2000 identifies it as "essential that Donegal County Council provides new landfill sites to take current and future waste arisings, irrespective of any other waste management infrastructure being set up". The current proposal is thus identified as essential waste management technology for the area. The proposed facility does not conflict with the objectives of the plan.

The 2005 Draft Waste Management Plan for Donegal County has not been issued yet.

# 8. Environmental Impact Statement

I have examined and assessed the EIS and am satisfied that it complies with the EIA and Waste Licensing Regulations as per Article 14 letter of acknowledgement.

# 9. Compliance with Directives/Regulations

The facility falls under the scope of the IPPC and Landfill directives. In relation to the Groundwater Directive, the facility will not have any direct emission to groundwater.

The facility as conditioned by the RD complies with the requirements of the Landfill Directive. The systems specified/conditioned by the RD for lining, leachate collection and capping comply with BAT.

The applicant states that the proposed development of a fully engineered containment landfill will meet the requirements of the Landfill Directive and Groundwater Directive with respect to off site compliance.

# 10. Submissions

There were nine submissions made in relation to this application.

<u>10.1</u> Submission from Meenaboll Environmental Protection Group (MEPG), c/o Mr Gerry Mulgrew, Secretary, Claggan, Church Hill, County Donegal

MEPG makes 17 points in their submission which have been grouped into the following issues/themes:

## (i) Surface Water Management

MEPG states that they do not want to see River Finn and Gartan Lake polluted. MEPG notes that River Finn which is one of the finest salmon rivers in Europe will be polluted and that Sruhanpollandoo steam which is an integral part of the site can not be protected. MEPG questions the safety of the method of containment and fears that leakage will go into River Finn.

**Comment**: The Shruhanpollandoo stream flowing through the proposed site will be culverted (Condition 3). Any stormwater discharges will be discharged to settlement ponds and a constructed wetlands prior to discharge to the stream. Condition 6 of the RD requires that a telemetry system be installed to monitor the stormwater both at the inlet to the surface water settlement ponds and at the outlet from the constructed wetlands. Furthermore condition 5 requires that criteria/trigger levels activating closure of the outlet from the stormwater is not discharged into the stream. For further discussion of the surface water management system see Section 4.3 above.

#### (ii) Site Selection

MEPG states that DCC have a history of poor site selection for their landfill and that DCC failed to provide a meaningful consultation for Meenaboll with all the meetings held after the decision was made.

**Comment:** I assessed the site location on environmental grounds when assessing the waste licence application and details of site selection are also included in the EIS submitted with the application which I am satisfied complies with the EIA and Licensing Regulations.

#### (iii) Donegal Waste Management Plan

MEPG notes that during the consultation process for Donegal Waste Management Plan 2000 several issues such as recycling and recovery priority over landfill and decentralised waste management facilities were raised but none of this has happened. MEPG stats that the four to five landfill sites in the 2000 Waste Management Plan have now been decreased to two from four. MEPG states that the landfill was originally planned as a West Donegal Landfill and now increasing number of electoral districts will be using the landfill.

**Comment**: While the policy document *Changing our Ways* emphasises the need for a considerable change in the practice of waste management it is also recognised that waste disposal capacity for residual waste is a requirement for the short to medium term. Donegal County Council in formally adopting the Waste Management Plan for the county have reaffirmed their commitment to diverting the maximum quantity of waste away from landfill in accordance with national policy. The landfill can only accept pretreated/residual waste from summer '06.

## (iv) Drinking Water

MEPG is concerned with the drinking water supply from Lake Gartan being polluted by potential punctures/leaks of the liner which would allow leachate leakage.

MEPG also states that the water in Lake Gartan may be poisoned by vermin and birds.

**Comment**: The applicant states in the application that investigations show that the groundwater and surface water that drains through the proposed site is directed towards the Finn catchment and therefore there will be no impact on the surface water and groundwater abstractions within the Lake Gartan cathcment. Sruhanpollandoo stream and downstream water courses are not used as drinking water supplies.

Condition 5 of the RD requires that the applicant shall ensure that vermin and birds do not give rise to nuisance at the facility or in the immediate area of the facility. Furthermore Condition 6 request that the applicant shall prevent bird from gathering and feeding at the facility by use of birds of prey and/or other bird scaring techniques.

#### (v) Leachate Management

MEPG states that the Letterkenny Wastewater Treatment Plant is not performing properly with EPA test findings showing 98-100% failure rate. MEPG believes it will be years before a plant upgrade will occur and this means there will be nowhere to treat leachate from the proposed facility.

Further MEPG states that the figures used for rainfall in the Meenaboll area are incorrect and therefore it could be assumed that the provisions for storage, treatment, transport and disposal of leachate is inadequate.

*MEPG* notes that the leachate collection system may clog up resulting in overflowing of leachate down the slopes to the nearby waterways.

**Comment**: Condition 5 of the RD request that the applicant submit evidence to show that an agreement is in place regarding leachate removal from the site and treatment. This would allow for the leachate treatment to be carried out at an appropriate alternative wastewater treatment plant, if needed. Furthermore the applicant has proposed to carry out leachate recirculation at the facility which Condition 6 of the RD allows for.

I have received data from the Climatological division of Met Éireann which shows that the average annual rainfall for the years 1998 to 2004 at the Glenveagh climatological station is 1578mm. The calculation in relation to leachate storage and collection infrastructure submitted as part of the application is based on an estimated

average annual rainfall of 1600mm which I consider reasonable given the data from Met Éirann.

Condition 6 of the RD specifies the required leachate management control measures at the facility which would prevent overflow of leachate as described by MEPG. As part of the SEW for the leachate management system (Condition 3 and Schedule D of the RD) the applicant will be required to take preventative measures to reduce clogging of the leachate collection system as detailed in the Agency's publication *Landfill Manual Landfill Site Design*.

# (vi) Roads

MEPG states that the road access to the site is poor and bends of the road would be a source of accidents.

**Comment**: The off-site road network and traffic issues are a matter for the An Bord Pleanála and the roads authority.

## (vii) Waste Management

MEPG does not see how separation of waste would be carried out after compactors in the vehicles have crushed the waste collected.

**Comment**: Condition 8 of the RD only allows for pre-treated wastes as set out in Article 6 (a) of the Landfill Directive to be disposed of at the proposed facility.

## (viii) Proposed Waste Quantities

MEPG feel that the tonnage of 24,000 tpa is understated as it is based on several landfills being in operation and does not take into account illegal waste disposal activities.

**Comment**: The RD only allows for disposal of 24,000 tpa at the landfill (Schedule A).

#### (ix) Possible Expansion of Proposed Landfill

MEPG is concerned that if Meenaboll is opened it will continue to expand in all directions putting all three water sources (Swilly, Finn and Gartan) in extreme danger.

**Comment**: Any possible expansion of the proposed facility can only be dealt with under a review of the existing licence in accordance with Section 46 of the Waste Management Acts, 1996 to 2005 where the environmental impact on water sources will have to be reassessed.

#### (x) Lack of Competence

*MEPG* states that DCC appear to significantly lack competence to properly operate any waste management facility.

**Comment**: The applicant will be required to operate the facility in accordance with the conditions of the waste licence. Condition 2 of the RD sets out requirement for qualification of staff working at the proposed facility. Furthermore as part of the waste licence the applicant is obliged to deal directly with complainants and to resolve any complaints that may arise (Condition 11). The Agency will carry out enforcement actions to include site inspections, audits and monitoring as well as

review of documents, reports, records, etc. that the applicant will be required to prepare under the waste licence.

## 10.2 Submissions from Dr. Patrick Boylan, The Loughs Agency, 22 Victoria Road, Prehen, Londonderry, BT47 2AB

Dr Boylan makes three submissions. The first submission contains a cover letter (details discussed below). The second submission contains a cover letter with the same wording as the first submission and an attachment *Genetic Analysis of the wild salmon populations and fisheries of the Foyle system* which was not included in the first submission. The issues raised in the first and second submission is set out below.

Dr Boylan states that the Loughs Agency has serious reservations regarding the choice of site. The Loughs Agency feels that the landfill poses a significant threat to the salmon population of the Cummirk and River Finn. The proposed landfill is in the headwaters of the River Finn catchment on a tributary of the Cummirk River which has been designated SAC for Atlantic salmon under the EU Habitats Directive. Recent extensive genetic study has shown that each tributary of the Cummirk River has a separate identifiable salmon population, which is unique for the salmon in River Finn.

The River Finn holds substantial stocks of 1 sea-winter salmon. The river is also one of the few rivers internationally where the multi-sea-winter spring salmon is not in global decline. Furthermore Dr Boylan states that the recent genetic work highlights the importance of the 1 sea-winter Finn stocks to downstream commercial fisheries and the River Finn also provides a valuable rod fishery attracting anglers to the disadvantaged rural area. Based on these observations Dr Boylan states that there are national and international obligations to ensure that these stocks are afforded the best possible protection to ensure their continued survival.

Dr Boylan raises the following issue in his third submission:

Dr Boylan states that he has become aware that vermin control at the proposed facility will include the use of poison. The Loughs Agency is concerned about poison penetrating the local watercourses and thereby impact on of the downstream SAC designation for salmon and their habitats. In addition he states that it is the Loughs Agency's view that there is no way of guaranteeing that waste of a hazardous nature will find its way to the site. Finally Dr Boylan states that these additional concerns reinforces the Loughs Agency's view of the potential damage to the areas designation under the EU Habitats Directive and also would not comply with the aims and objectives of the Water Frame Work Directive.

**Comment**: It is noted that the applicant has detailed in the EIS submitted with the application that the Northern Regional Fisheries Board has advised that the area of interest at Meenaboll is within the jurisdiction of the Loughs Agency. In relation to the surface water management issues raised above see Sections 4.3 and 10.1(i) of this report.

Condition 11 of the RD request that a proposal be submitted to the Agency in relation to vermin control. The condition outlines several aspects in relation to use of rodenticide and insecticide at the proposed facility including measures to contain sprays within the facility boundary. In relation to acceptance of hazardous waste at the facility see Section 10.1.viii above.

<u>10.3 Submission from Neil Mc Geehan, Meenatinney, Fintown P.O., Donegal,</u> <u>County Donegal</u>

Mr Mc Geehan makes four points in his submission.

(i) Mr Mc Geehan strongly objects to the landfill in Meenaboll. He states that he is surprised at the choice of location at the height of 800 –1000 feet above sea level.

**Comment**: The site selection process is outlined in the EIS. See Section 10.1 (ii).

(ii) Mr Mc Geehan states that he has seen salmon spawn within yards of the proposed site and that DCC have admitted leachate will spill into this stream. He states, "Do we want to poison the River Finn, one of the best salmon rivers in Europe".

**Comment**: The measures addressing the potential impacts on surface waters and associated conditions imposed by the RD are detailed in earlier sections of this report. In granting a licence the Agency must be satisfied that emissions from the activity will not cause environmental pollution or breach any receiving water quality standard. See Sections 4.3 and 10.1(i) above.

(iii) Mr Mc Geehan states that he has seen golden eagle and grouse. He states, "many birds live and produce in this area". Furthermore Mr Mc Geehan states that badgers, foxes, deer and other wildlife live in this area.

**Comment**: The applicant has carried out fauna surveys in the area and according to the Article 14 reply submitted on 31/08/05 none of the sensitive bird species breed at the proposed site.

(iv) Mr Mc Geehan states that vermin poisoned at the proposed site will poison the drinking water from Lake Gartan as the lake is fed by a stream that starts at the proposed site.

**Comment**: Measures to address the control of vermin are outlined in the earlier paragraphs of this report with specific measures imposed by way of conditions that address this issue. See Section 10.1(iv) above.

10.4 Submission from Hugh McMonagle, Meenatinny, Fintown, County Donegal

Mr McMonagle states that he objects to the application being granted due to the many dangers and pollution it will cause to the area. He makes the following points in his submission as detailed below.

(i) Mr McMonagle states that Shrupollandoo Stream which runs through the proposed site will be polluted. This stream runs into Lake Gartan and River Finn which in turn will be polluted. Mr McMonagle is also concerned that leachate will run into local waters from the proposed site.

**Comment**: As stated earlier in this report the Agency must be satisfied that emissions from the activity will not cause environmental pollution or breach any receiving water quality standard and this applies in particular to the *Sruhanpollandoo Stream*. Control measures are specifically inserted in the RD to deal with leachate. See Sections 4.3 and 10.1(i) above.

Condition 3 of the RD requires that leachate management infrastructure is installed at the facility. Condition 6 details the requirements in relation to leahcate management at the facility. Further the RD requires that the cells are capped within twenty four

months of being filled to the required height to minimise the amount of leachate generated at the proposed facility (Condition 10).

(ii) Mr McMonagle is concerned about the health aspect during the summer months when he states, "an odour will be present with the heat and attract insects, flies and vermin which will carry disease". He also worries about how strong the odour will be and how far it will travel.

**Comment**: Condition 6 of the RD ensures that potential nuisances at the facility are controlled. Operational controls specified in Condition 6 of the RD include requirements on minimising the working face and cover requirements to mitigate against the potential for nuisances from odours/flies.

(iii) Mr McMonagle states that he is extremely anxious as to how this will affect farming in the area.

**Comment**: Condition 3 of the RD requires that a buffer zone shall be maintained surrounding the proposed facility.

<u>10.5 Submission from Chris De Margary and Mick Hucknall, Glenmore Rivers, PO</u> Box 46786, London SW17 6WZ, England

Mr Margary and Mr Hucknall (as owners of the Glenmore Fishery on the upper River Finn at Glenfin, County Donegal) are in the early stages of an expansive development project for the Fishery, encompassing fishery management, river improvement and tourism growth for the area. They raise the following issues in their submission:

Mr Margary and Mr Hucknall state that they "find it of great concern that there is a proposal for a landfill site at Meenaboll". They outline that the site is "dangerously" close to Cummirk River which is the most important spawning river on the system especially as it is utilised by the very important spring runs.

Mr Margary and Mr Hucknall state that the environmental risk and potential damage in the event of leakage or spillage outweighs any local need for a landfill site. They further state that if any pollution of the river occurs, they will be forced to seek immediate redress through the courts at the highest level against those directly responsible.

Mr Margary and Mr Hucknall further state that they are fully supportive of local objections to the proposed facility and that they are pleased that senior management of the Loughs Agency share their concerns and the concern of Glenfin Community.

**Comment**: The conditions in the RD are specifically designed to provide the necessary level of protection to receiving waters to ensure that emissions do not cause environmental pollution. The conditions range from the management of the facility to the provisions of certain infrastructure and operational measures to allow for the activity to be carried on in such a way that it does not cause environmental pollution. A range of monitoring measures are also being imposed that will provide information on the environmental performance of the licensee together with reporting requirements. All reports arising from the requirements of the RD will be made available to the local community in accordance with the communications programme. See Sections 4.3 and 10.1(i) above.

<u>10.6</u> Submission from R. McGowan, Secretary, Glenswilly National School, Glenswilly, Letterkenny, Co. Donegal

R. McGowan, Secretary of the Board of Glenswilly National School raises the following issues:

The board is concerned with the impact of the landfill on the safety of the children and staff of Glenswilly National School. R McGowan states that the R250 Fintown to Letterkenny road passes directly outside the school and the last thing they need is significantly more traffic on this road every school day.

*R* McGowan states that the most worrying aspect for the board is leachate tankers passing the school twenty four hours per day to the waste treatment plant in Letterkenny as the tankers would have to negotiate the dangerous bends and intersections.

**Comment**: The off-site road network and traffic issues are a matter for the An Bord Pleanála and the roads authority.

<u>10.7</u> Submission from Coiste Ghleann Domhain, c/o Marian Gibbons, Secretary, Derrora, Church Hill, Letterkenny, County Donegal.

Coiste Ghleann Domhain (CGD) states that they are a community group seeking to promote and represent the area of Glendowan. CGD raises the following issues:

(i) CGD states that Owenbeg River rises beside the proposed site runs through Glendowan to Bulluba River and on to Gartan Lake, the public water supply for about 600 houses. The group states that they are in the process of finalising their Group Water Scheme for the Glendowan area (about 60 houses) and they are seriously concerned with the possible negative impact that the proposed landfill and any resulting pollution would create.

**Comment:** As detailed earlier in this report the landfill is not located within the Gartan catchment and the proposed landfill will therefore not have any impact on the surface water and groundwater abstractions within the Lake Gartan catchment

(ii) CGD states that their greatest concern is that DCC have based the safety of the landfill on the premise of containment. The group states that they have looked at the actual membrane and find that it would be easily damaged and they consider the weld of <sup>1</sup>/<sub>2</sub> inch to be the weak link. Furthermore they state that DCC and consultants have stated that there will be some leakage and that the EIS refers to heavy rainfalls causing minimal spillage. The group also refers to the LandSim Model in the EIS indicating that volume of leachate leakage will be minimal. According to the group this means minimising it and not containing it. The group states that this might be acceptable in a low-lying site with no water sources nearby but not at such an elevated and sensitive site as Meenaboll.

**Comment:** The conditions of the RD are set to ensure the necessary level of protection to receiving waters so emissions do not cause environmental pollution. Condition 3 of the RD details the requirements for installation of landfill lining system and leachate management system at the facility.

(iii) The group also highlights that the it is one of the wettest spots of Ireland and that surface water is continually flowing to the River Finn and Glendowan and Pollandoo Stream runs through the proposed site and "it will not be possible to contain such natural occurrences".

**Comment**: As stated earlier in this report the Agency must be satisfied that emissions from the activity will not cause environmental pollution or breach any

receiving water quality standard and this applies in particular to the *Sruhanpollandoo Stream*. See Sections 4.3 and 10.1(i) above

# 11. Charges

The RD requires that the applicant shall pay an annual contribution of 23,188 (Condition 12.1).

## 12. Recommendation

I recommend that a licence be granted subject to the conditions set out in the attached RD and for the reasons as drafted.

In making the recommendation for a waste licence I have taken into account all information submitted as part of the application including the Environmental Impact Statement and the submissions.

I am satisfied, on the basis of the information available, that the waste activity, or activities, licensed hereunder will comply with the requirements of Section 40(4) of the Waste Management Acts, 1996-2005.

Signed

Pernille Hermansen Inspector, Office of Licensing & Guidance

#### 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 1996-2005.