This report has been cleared for submission to the Board by the Programme Manager Frank Clinton Signed: Alceler Dated: 29 (3/2)



Dated: 29/3/20)0 FFICE OF CLIMATE, LICENSING & RESOURCE USE

INSPECTORS REPORT ON A LICENCE APPLICATION		
TO:	DIRECTORS	
FROM:	John McEntagart	- Licensing Unit
DATE:	23/03/2010	
RE:	Application for a review of a Waste Licence from Bord na Mona Energy Limited, Leabeg, Tullamore, Country Offaly, Licence Register W0199-02.	

Type of facility:	Landfill
Class(es) of Activity (P = principal activity):	3 rd Schedule: Class 1 (P), Class 4 and Class 13. 4 th Schedule: None
Quantity of waste managed per annum:	75,000 tonnes (over 1 to 2 years)
Classes of Waste:	Peat.
Location of facility:	Srahmore and Attavally, Bangor-Erris, County Mayo.
Licence application received:	18/05/09
Third Party submissions:	One
EIS Required:	Yes
Article 14 Notices sent:	15/09/2009
Article 14 compliance date:	09/10/2009
Site Notice Check:	10/07/2009 (Wayne Egan)
Site Inspection:	25/08/2009 (John McEntagart)

1. Facility

Bord na Mona Energy Limited (BnM) are applying for a review of a waste licence to deposit additional peat waste in the peat disposal area currently licensed under Waste Licence Reg. No. W0199-01 at Srahmore, near Bangor, County Mayo. The application relates to the placement of a further 75,000 tonnes of peat waste excavated from the development of a gas pipeline for

the Shell Corrib Gas Field Terminal (IPPC Licence Reg. No. P0738-01) at nearby Bellanaboy Bridge. Approximately 450,000 tonnes of peat were placed in the facility in 2005 and 2007 from the development of the Gas Terminal site – no peat deposit activities took place in 2006.

The peat will be temporarily windrowed on the site of excavation to reduce free water content and then transported by road in trucks to the BnM deposit area. It is anticipated that the peat transport and deposit will take place over a 3 to 4 month period. The proposed hours of operation are as per the existing licence: 7am to 7pm, Monday to Friday, and 7am to 4pm, Saturdays for *peat delivery*; and 7am to 9pm, Monday to Friday, and 7am to 6pm, Saturdays for *internal site operations*. Up to 50 people are expected to be employed in the transfer and deposition of peat during peat deposition operations.

The Srahmore Peat Deposit Area (PDA) is on a cutover BnM bog that has been in use for the previous 40 years to supply peat to the nearby ESB power station. The Srahmore bog had been included within the scope of IPPC licence Reg. No. P0505-01, which covers all the BnM Mayo bog group, but came under Waste licence Reg. No. W0199-01 when this licence was granted for the first peat deposit campaign. The proposed peat deposit plan will fill in the void areas left over from the previous peat deposition campaign and is in keeping with the overall objectives of the BnM Mayo group bog rehabilitation scheme (regulated under IPPC Licence Reg. No. P0505-01). The site boundary for IPPC Licence Reg. No. P0505-01 was modified to cater for the grant of Waste Licence Reg. No. W0199-01

Geomorphologically, the Srahmore peat deposit area (PDA) resembles a shallow bowl like feature with an area of c.63 ha. Carrowmore Lake lies to the north of the site, Munkin River lies to the west and Owenmore River lies to the south (see Appendix I).

2. Operational Description

The deposit area is in a series of low fields (11 to 14m wide strip of bogland defined by field drains) separated by high fields. As a result of the former harvesting technique, the area is divided into seven bays, each separated by a high field (area of bog approximately 2m higher than the cutover areas each side). The side tipping 'Haku' trailers deposit the peat on the high field and a long reach excavator then lifts it into the bay for spreading by a bulldozer. The peat will be profiled to fall gently from the centre of a bay to the margins.

The whole operation of receipt, deposit and land-forming of the peat will take place over a period of 3 to 4 months. This may be spread over two seasons depending on weather and ground conditions.

The Srahmore facilities will comprise a peat reception area, fuel services, truck parking, internal haul roads, sedimentation ponds, wheelwash, weighbridge, office and support buildings. Peat delivered to the site will be deposited by the haulage trucks in a reception area and then transferred by loader to special low ground bearing pressure tractor and trailer units (referred to as 'Haku units').

The surface water management system for the operation includes the maintenance of a storm-water collection network delivering to a series of specially engineered silt ponds. There is also provision for an over-flow or flood area where, in the event of extreme storm flows, water will be diverted to a large area of adjacent bog. This prevents the sedimentation lagoons being washed out.

Condition 3.1 of the Recommended Decision (RD) requires all infrastructure to be established prior to the acceptance of waste and Condition 3.2 requires a construction plan for the necessary infrastructure to be submitted one month prior to the commencement of site re-development.

3. Use of Resources

The facility has a low demand for energy and water (office & canteen use and wheel cleaner). The 2007 AER put fuel consumption at circa 183 m³ marked gas oil and 1 m³ of petrol and electricity consumption at 28,000 kWhrs. There will be a seasonal high use of fuel for the internal peat movement and placement equipment.

4. Emissions

4.1 <u>Air</u>

There are no specific point source emissions to atmosphere of environmental significance. The peat to be moved is not milled therefore the potential for dust generation (fugitive emissions) will be limited to that fine material potentially generated on internal peat transport roads. The applicant proposes to maintain hardcore tracks for the Haku units as well as instigate a number of other dust suppression measures, e.g. wheel-wash, road spraying, etc.

Dust deposition monitoring took place during peat deposition activities at five locations in 2005 and 2007. The application indicated that 3 out of 35 samples in 2005 and none out of 30 samples in 2007 breached the dust deposition standard in the licence ($350 \mu g/m^2/day$). No dust related complaints were made during the periods of peat deposition.

It is not anticipated that the activity will produce air emissions of any significance – the scale of the proposed peat deposition campaign is about one fifth of the previous campaign. The RD proposes to continue the dust monitoring required under Waste licence Reg. No. W0199-01.

4.2 Emissions to Sewer

There shall be no emissions to sewer associated with this activity.

4.3 Process Effluent and Leachate

There shall be no process effluent emissions associated with this activity. The deposited peat will be similar in character to the existing peat material in the peat deposit area and will not produce a leachate in the conventional sense.

4.4 Storm Water Runoff

The principal potential impact of storm water discharges from the site relate to the siltation of water courses from sediment laden run-off. This has the capacity to adversely affect aquatic invertebrate and vertebrate communities and the potential to impact upon fish spawning and nursery grounds. The stability of the deposited peat mounds as well as surface water run-off will be important in this regard. The deposited peat will be mounded and graded within each bay to achieve a maximum approximate height at the centre of each lowfield bay of approximately 2 m to facilitate stability and drainage considerations. A stability assessment carried out in 2007 on peat deposited in the first campaign indicated a maximum depth of 1.5 m.

There is also the potential impact of fuel oil pollution from the reception area. Conditions 3.23, 3.24, 3.25, 3.26 and 3.30 of the RD stipulate requirements, including bunding, to control the risk of fuel oil pollution.

Regional drainage network

The site of the facility is located within the lower reaches of the Owenmore River (c.4km upstream of Tullaghan Bay). The site is bordered on the south by the Owenmore and on the west by the Munkin River. The Munkin, which drains Carrowmore Lake, merges with the Owenmore about 1km upstream of Tullaghan Bay (part of Blacksod Bay Complex, SPA).

The Owenmore River and Carrowmore Lake are important salmon fisheries, with the Munkin River linking the two. The Munkin River is of key significance for fish travelling from the Atlantic ocean to spawning beds and the lake, although it is not a significant contributor to salmonid productivity due to the absence of appropriate spawning and nursery habitats, it is still of importance for angling (salmon and sea trout). The proposed peat deposit area will have three storm water discharge points: two small discharges to the Owenmore River (S5-1 and S5-2), with the main discharge to the Munkin River (Location 7).

The lower reaches of the Owenmore River has been assigned a Q-Value of 4-5 (Unpolluted) based on biological surveys carried out in 2005, and the Munkin River and the Owenmore River just downstream of the confluence with the Munkin River have both been assigned a Q-Value of 4 (Slightly Polluted) based on biological surveys carried out in 2008.

The Water Framework Directive status is *Moderate* for the Munkin River, *Good* for the Owenmore River and *High* for Tullaghan Bay. The Water Framework Directive risk category for each of the Munkin River, the Owenmore River and Tullaghan Bay is *2b*, *strongly expected to achieve good status*.

<u>Site Drainage</u>

All water falling on the site ultimately drains to the Owenmore River and /or its tributaries, the Munkin River and the Srahmore stream (i.e. the main water drain). The main water drain from the Srahmore site discharges to the Munkin River. All run-off is gravity drained in a controlled manner.

The main emission from the facility, identified as 'Location 7', will be from the two principal settlement lagoons for the PDA. These discharge to the Munkin River via the main water drain. The other notable discharge is storm water from the service area; also to the Munkin River via the same drainage channel. Storm water discharges in the main drainage channel are monitored at *Location 7* (outfall ID). There are also two settlement ponds that discharge through outfalls S5-1 and S5-2 to the Owenmore River.

The EIS states that the drainage system has been designed for a hundred year storm event of one hour duration. The applicant also regulates and controls discharges by appropriate sizing of the perimeter swale and field drains, i.e. allow a gradual throttled drainage to the settlement ponds. The perimeter swale is the main conduit from deposition areas to the settlement structures prior to the main outfall. There is also an overflow area, in case the 100 year storm event is exceeded, to ensure the treatment systems do not become overloaded. The overflow area prevents the scouring of settled deposits during flood flow. Water flow from the perimeter swale to the two settlement ponds that discharge to the Owenmore River is also controlled to maintain treatment efficiency.

The site drainage infrastructure was upgraded to facilitate the previous peat deposition campaign. The applicant's EIS reported that the applicant has discussed the new campaign with the North Western Regional Fisheries Board and that it is proposing no alteration to the drainage infrastructure because it worked satisfactorily the previous time.

The effective drainage of the peat mounds, the limiting infiltration of rainwater into the mounds and the re-vegetation of the peat to anchor surfaces will significantly reduce the risk of the deposited peat impacting on the surrounding aquatic environment.

The reception area for peat material is bunded, with run-off directed to an engineered drain from which it undergoes treatment in a deep settlement tank, a grit trap, an oil interceptor and a final settlement pond before continuing to the main drain.

Condition 3.3 of the RD requires the licensee to carry out any necessary upgrade or maintenance to the site drainage infrastructure. Conditions 3.17 and 3.18 stipulate operational and design criteria for the silt ponds. Conditions 6.11.3, 6.11.4 and 6.11.5 stipulate further measures for the control of silt, and other debris, in surface water run-off.

Impact of storm water discharges

Storm water discharges from the PDA can contain suspended solids. Ammonia is also characteristic of run-off from disturbed peat lands. In relation to suspended solids, BAT for the sector is the use of specially engineered sedimentation lagoons. The outlets from Area 7 (overflow discharge area) are also sealed. The overflow discharge area (Area 7) is a large area of cut-over bog, to which excessive flows can be directed in order to protect the settlement ponds. This proposed solution is an enhancement of BAT as it currently exists in Ireland for the treatment of suspended solids in run-off for the peat harvesting sector.

The mitigation measures operated effectively in the previous deposition campaigns in 2005 and 2007 despite some operational difficulties as detailed below.

Suspended Solids:

Results of monitoring of suspended solids levels in the Munkin River under the existing licence identify that the levels downstream of the outfall follow the same pattern as those upstream for the most part indicating the activity is not having a significant impact.

For the main outfall (Location 7), there were 45 non-compliances out of 1133 samples in the period April 2005 to August 2009 - a 97.5% compliance rate. Many, but not all, of the non-compliances did take place during the deposition period. The causes of the non-compliances were identified and the appropriated corrective/preventive measures implemented.

It should also be noted that the effluent undergoes further treatment after the Location 7 outfall, a further 800 or 900 m down-gradient, at a settlement pond associated with the Bord na Mona peat extraction activities that operate under IPPC licence, P0505-01, before discharging to the Munkin River and monitoring at this point has indicated full compliance.

There are two other small emissions to the Owenmore that discharge through S5-1 and S5-2. Monitoring of suspended solids from 01/04/05 to 31/08/2009 indicated one non-compliance out of 159 samples for S5-1 and three non-compliances out of 157 samples for S5-2 – of these three non-compliances, one occurred during the construction period, one during the peat deposition period and one during the period of maturation.

Ammonia:

Results of monitoring of ammonia levels in the Munkin River under the existing licence identify that, occasionally, downstream levels are greater than upstream levels. In particular, during the 2005 peat deposition period downstream levels were occasionally greater than upstream levels, but for the 2007 deposition period ammonia levels downstream of the outfall were similar to those upstream. However the results were highly variable both upstream and downstream of the outfall, including outside deposition periods, which indicates that ammonia levels relate more to terrain/natural factors than the site activities. The data also indicates compliance with the European Communities Environmental Objectives (Surface Waters) Regulation, 2009 (S.I. 272 of 2009) for a high status water body.

Biological Monitoring:

Biotic index surveys carried out in 2005 and 2007 indicate the Munkin River Q-rating improved from class C (moderately polluted) to class B (slightly polluted), indicating no negative impact as a result of the previous deposition

campaign. In line with the recommendations from the Office of Environmental Assessment it is recommended that future biological monitoring, required under the RD, should be in terms of the *Small Stream Risk Score* (SSRS), instead of the Q-Rating.

The operational controls and emission limits proposed in the RD will ensure that the receiving water quality and ecological systems are protected.

4.5 Emissions to ground/groundwater:

There are no direct discharges to ground from the facility. The EIS reports that the aquifer potential is considered to be poor with moderate to low vulnerability. The groundwater flow direction is generally towards the west to southwest within the site, towards the Munkin and Owenmore Rivers.

Groundwater data for monitoring conducted under the existing licence (W0199-01) does not indicate a significant impact form peat deposition activities. There is one up-gradient and three down-gradient boreholes – two for the peat deposition area and one for the peat reception area.

Elevated levels of COD were recorded, but the data was erratic with no discernable trend for down-gradient monitoring points. COD is typically elevated in ground waters in bog terrains, but there is no interim guideline value (IGV) for it.

Ammonia levels are also erratic and elevated (1 to 5 mg/l where the IGV is 0.15 mg/l). No clear impact could be identified from the data, although data for some boreholes may indicate an upward trend compared to pre-deposition levels (1 to 3.5 mg/l). However, elevated ammonia levels are typical for the natural geochemistry of the site and as up-gradient levels are in the same range as down-gradient levels, it is considered that no significant impact has taken place or is likely for the proposed activity.

Levels of Diesel Range Organics (DRO) were below the level of detection except for a period between April and July 2007 and more recently in 2009. The applicant had considered the cause of elevated DRO concentrations related to either the sampling methodology or the parking of plant and equipment near the relevant borehole. However, given the activity was not ongoing during 2009, the levels detected may be due to interference with natural organics in the groundwater due to the presence of overlying organic peat deposits. Condition 9.3 requires such incidents to be investigated and the relevant remedial actions undertaken.

Other parameters were all below their respective IGVs.

Accordingly it is proposed in the RD to continue the existing monitoring program.

4.6 Wastes Generated:

The non-hazardous wastes produced by the facility comprise the standard small office, toilet and canteen type waste. Small amounts of hazardous waste will include any used spill-kit material, oily rags and oily sludge from the interceptors at the service area. All these waste will be sent off-site to authorised facilities.

A temporary holding tank for sanitary effluent will also be maintained at the site, with the effluent to be taken by a waste haulier to a waste water treatment plant.

The stone used to lay the internal tracks will be lifted as part of the decommissioning process. The disposal/recovery of this material can be agreed under the Bog Rehabilitation Plan (Condition 10.3).

<u>4.7 Noise:</u>

Noise emissions associated with the peat deposit and spreading activities are compatible with regular landfilling and peat extraction activities and will be related to the movement of trucks into and out of the site and the noise from vehicles unloading and working deposited peat. Truck movements per hour should not be greater than that of the previous peat deposition campaign because much less peat is being deposited.

The applicant submitted monitoring data for a noise survey carried out in 2005 at three locations during peat deposition activities. The noise pressure levels, measured as LA_{eq} , indicated a breach of the licence limit of 55 dB(A), i.e. 48 to 72 dB(A). However noise pressure levels measured as LA_{90} were all compliant, i.e. 40 to 53 dB(A). This indicates that off-site noise sources, in particular traffic, were the cause of the exceedances. The applicant advised that noise surveys carried out in 2007 produced similar results.

The applicant's EIS included a background noise survey (i.e. no deposition activities) conducted in 2008 that also reported similar results. The EIS included predictions of the noise impact of the facility and also concluded that the day time noise limit should not be breached. The applicant does not proposed to operate during the night, nor is it allowed by the RD. There was only one noise complaint in 2005 (related to vehicle reversing alarm) and no noise complaint in 2007.

There will be no continuous tonal or impulsive noise component likely to result in nuisance. Intermittent noise for vehicle reversing alarms (Health and Safety requirement) will likely be audible in the immediate area of the facility.

Having regard to the temporal nature of the works and the previous use of the site it is considered that the noise emissions from the site will not result in a significant impact. Standard Agency conditions in relation to noise control are included in the RD.

4.8 Nuisance:

Dust, noise and soiled roads comprise the potential nuisance factors associated with this activity. Dust and noise have been dealt with above. In regard to soiled roads, the RD includes requirements for a wheel wash for trucks exiting the site.

5. Restoration

Site decommissioning and rehabilitation had commenced in line with the existing Waste licence. Another deposition campaign will mean reviewing the existing rehabilitation plan. The applicant advises that the Srahmore peat deposition site has now become a case study attracting international interest regarding the management and stabilisation of peat. Accordingly the applicant proposes to maintain the site access infrastructure in order to facilitate the study of the peat stabilisation program (expected to take about five years). The RD maintains the same conditions regarding bog rehabilitation and aftercare, and any modifications to the existing bog rehabilitation plan can be agreed under the licence.

Peat Stability:

A stability assessment was carried out in December 2007 after the previous deposition campaign. The assessment concluded that there was no indication of instability in the internal high fields, the perimeter high fields, the deposited peat and the drainage network. There was a low risk of peat flowing out of the bays and the report advised that maintenance of the drainage network was critical to stability.

Accordingly it is proposed in the RD to continue the existing monitoring program. This includes undertaking a stability assessment following deposition of peat within the site, the inspection of mounds visually on a monthly basis or after heavy rainfall and an annual assessment of vegetation cover.

6. Cultural Heritage, Habitats & Protected Species

The EIS notes that the northwest Mayo coastline, and in particular, the Erris peninsula and its associated coastal habitats is recognised as being of significant ecological value.

There are no designated sites of archaeological, ecological or heritage status within or immediately adjacent to the site. There are, however, 14 designated areas (6 cSACs, 2 SPAs and 6 pNHAs) within about a 10km radius of the PDA.

The main Annex I habitat (Habitats Directive) within the area is *Atlantic Blanket Bog*, although there are no Annex I habitats within the site. The designated areas are host to species listed in Annex II of the Habitats Directive, in particular otter, salmon, lamprey, two plant species and three bird species (i.e. Golden Plover, Whooper Swan and Greenland White-fronted geese). There are also two Annex IV species within 10 km of the site, i.e. Merlin and Red grouse.

Carrowmore Lake which lies 1km to the north (and up-stream) of the facility, and the Owenduff/Nephin Bog Complex are the nearest designated sites. Of the designated areas only Tullaghan Bay and Blacksod Bay are hydrogeologically/physically connected to the site. Tullaghan Bay is designated as a pNHA, an SPA, an Important Bird Area, and as a *Ramsar* site.

Impacts of first deposition campaign

The site of the PDA is considered to be of low ecological value. Its most significant aspect is that it is in the catchment of the Munkin River that flows into the Owenmore River and ultimately Tullaghan Bay pNHA. The quality of water has not worsened since peat deposition last took place. The main drain through the site is not significant for salmonid production in the catchment (see section on storm water/surface water emissions regarding potential impacts on water quality).

The EIS reports that there had been a decrease in activity for mammals, frog breeding sites and certain bird species at the site in 2008 (post deposition) compared to 2004 (pre-deposition). However the EIS notes that there had been some fire damage to the fringe bog just prior to the latest survey.

Expected impacts from this campaign

The main habitat at the site is cutover bog which is a habitat of low ecological value. The short term impacts are likely to be neutral with bare peat covering bare peat. However, with re-vegetation and successional development the impact should be positive in the medium to long term – the applicant expects good re-vegetation cover after 18 to 24 months. There will be no impacts, temporary or otherwise, on any designated conservation area, as all are located at some distance from the development and as such are physically isolated.

The short term impacts relate to faunal disturbance and loss of foraging during the deposition period. The EIS noted that any works directly affecting badgers, otters or frogs must be done under licence from the National Parks and Wildlife Service (NPWS) by qualified persons and that the applicant should consult with the NPWS regarding any construction works or habitat restoration measures that could have an impact on designated sites downstream. The licensee must notify also the North West Regional Fisheries Board prior to works commencing.

The Bog Rehabilitation Plan (Condition 10.3) requires the licensee to consider the position of all relevant Agencies, Authorities and affected parties in determining its scope. This should include details of any necessary monitoring to confirm success of the rehabilitation, e.g. assessments of vegetation cover, successional development and peat stability.

The site of the PDA is currently degraded (drained and/or cut-over Atlantic blanket bog). The intended finished landscape for the site is considered to be supportive of native/listed species and will form a complimentary habitat. The EIS for the application concludes that there will be no permanent impacts on any designated area within 10km of the site.

7. Waste Management Plan

This facility is dedicated to the development waste, mainly peat, from a nearby site, gas pipeline. Accordingly the project will serve no function in any regional waste management plan infrastructure; nor will it contradict such a plan.

8. Environmental Impact Statement

I have examined and assessed the EIS and having regard to the statutory responsibilities of the EPA, I am satisfied that it complies with Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (SI 600 of 2001) and EPA Licensing Regulations (SI 85 of 1994, as amended).

9. 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 (RD) 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.

10. Compliance with Directives/Regulations

Landfill Directive [1999/31/EC]

For the purpose of Article 48 of the Waste Management Licensing Regulations 2004 (S.I. No 395) this facility is being classified as a non-hazardous waste landfill. This is because Council Decision 2003/33/EC (establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC) does not cater for peat going to inert waste landfills without the requisite leachate analysis.

The Landfill Directive is specifically addressed at municipal type wastes. It does not easily cater for mono-fill facilities with the type of waste proposed for Srahmore. The peat material does not generate landfill leachate in the conventional sense, because the deposited peat will be similar in character to the existing peat material on which it is to be placed. Section 3.4 of Annex I of the Landfill Directive advises that competent authorities may reduce or remove the requirements regarding a liner or leachate collection and treatment, if an assessment of the risks indicates the landfill poses no potential hazard to soil, groundwater or surface water. Accordingly, the proposal is considered to comply with the relevant sections of the Landfill Directive.

IPPC Directive [2008/1/EC]

The activity does not come under the scope of the IPPC Directive.

Water Framework Directive [2000/60/EC]

As discussed above, monitoring data indicates the facility did not compromise water quality during the first deposition campaign. Water quality in the Munkin and Owenmore Rivers was in line with the European Communities Environmental Objectives (Surface Waters) Regulation, 2009 (S.I. 272 of 2009) for a high status water body. Accordingly it is not anticipated that this second deposition campaign will cause any water bodies to breach the Water Framework Directive requirements.

The RL, as drafted, transposes the requirements of the Water Framework Directive. In particular, *Condition 5 Emissions* provides conditions regulating discharges to waters while *Schedule B: Emissions Limits* specifies limit values for those substances contained within the storm water discharges. The limits specified in the RD are determined with the aim of maintaining high water quality status.

Abstraction of water intended for human consumption:

The Agency's Geographical Information System (GIS) identifies that the Munkin River is registered for drinking water abstraction as per the Register of Protected Areas set up under Article 6 and Annex IV of the Water Framework Directive, although it did not identify an actual abstraction point at this river. Mayo County Council advised they do not have an abstraction point, nor do they know of any Group Water Scheme, associated with the Munkin River.

The EIS notes that, while the surface water quality is quite good, it does not naturally meet the drinking water standards. This situation is due to the elevated levels of ammonia, which are most likely related to the environment in which the water flows.

Whatever limitations exist in the use of water from the Munkin river, natural factors, rather than factors related to the proposed activity, appear to be at play.

EC Freshwater Fish Directive [2006/44/EC]

The Munkin and Owenmore Rivers are not designated as a salmonid waters.

EU Habitats Directive [92/43/EEC] and Birds Directive [79/409/EEC]

The impact of the activity on the habitats in the vicinity of the facility was assessed as part of the EIS for the proposed upgrade of the plant included in the licence application, hence an appropriate assessment of the impact on the habitats, as required by Article 6 of the Habitats Directive, has been completed. The conclusions of the assessment have been taken into account in preparing the RL.

As noted above the activity is not expected to adversely impact on any of the designated sites in the vicinity of the facility, provided the storm water control systems function adequatelyand in accordance with the conditions of the RD, as was the case for the first deposition campaign.

Other Directives

Condition 12.3 of the RD satisfies the requirements of the Environmental Liabilities Directive in particular those requirements outlined in Article 3(1) and Annex III of 2004/35/EC.

11. Compliance Record & Site Visit

The Agency's Office of Environmental Enforcement (OEE) advised that the licensee has generally been in compliance with its existing Waste licence, although it noted elevated levels of diesel range organics in the groundwater (at two monitoring wells) as discussed above.

<u>Site Visit</u>

A site visit of the facility was carried out on 25/08/09. An inspection was carried out on the peat reception and waste quarantine areas, the areas for depositing peat and the existing peat mounds, the site drainage system, the silt ponds/lagoons and associated outfalls, the surface water monitoring and discharge points, the overflow area, the Owenmore and Munkin Rivers, the monitoring boreholes and the dust monitoring locations.

The existing peat mounds appeared to be re-vegetating satisfactorily. Some infrastructure will need to be upgraded or replaced, e.g. roads and the weighbridge. In particular the main outfall (Location 7) was clogged with vegetation and will need to be properly maintained to facilitate accurate flow measurement (see Figure 1 below). Condition 6.4 of the RD requires such maintenance.



Figure 1. Main surface water discharge outfall from site (Location 7), clogged with vegetation.

12. Cross-office liaison

I have consulted with the Office of Environmental Enforcement Inspector for the facility, Liam O'Suilleabháin in relation to the current waste licence, Register No. W0199-01.

13. Fit & Proper Person Assessment

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

14. Proposed Decision

I am satisfied that the conditions as set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of the activities in accordance with the conditions will not cause environmental pollution.

15. Submissions

There was one valid submission made in relation to this application.

<u>15.1 Submission from Ms Monica Muller, Rossport, Ballina, County</u> <u>Mayo</u>.

Ms Muller considers that permission has not been granted by the joint owners of the land from which the peat will be excavated (Rossport Commonage) to the developers of the pipeline to excavate and export the peat to the Srahmore peat deposition site. Accordingly, she submits, the applicant will be accepting stolen property and that without evidence of a valid purchase or otherwise of the peat, the Waste licence application is invalid.

Comment:- This matter is outside the remit of the Waste licence. A valid Waste licence application has been received.

16. Charges

The current (2010) enforcement charge for the site is \in 7,040.72; the revised charge for the RD is \in 10,186.72 and is reflective of the enforcement effort required under the Conditions of the RD. The current charge relates only to remediation of the site after the previous deposition campaign, whereas the revised figure is for peat deposition and remediation.

17. Recommendation

In preparing this report and the Recommended Determination I have consulted with the Agency technical and sectoral advisor Mr. Brian Meaney.

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

John McEntagart

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 1996-2007.



Figure 1. Srahmore Peat Disposal Facility

<u>Appendix I</u>