

 OFFICE OF ENVIRONMENTAL SUSTAINABILITY
REPORT OF THE TECHNICAL COMMITTEE ON REPRESENTATIONS MADE ON A DRAFT CERTIFICATE OF AUTHORISATION
TO: Board of Directors
FROM: Anne Lucey, Technical Committee, Environmental Licensing Programme
DATE: 25 February 2021
RE: Representation on draft Certificate of Authorisation issued to Roscommon County Council for a closed landfill at Cloondacarra Beg, Castlerea, County Roscommon. Certificate of Authorisation Register Number H0394-01.

APPLICATION DETAILS	
Type of facility:	Closed landfill as defined in the Regulations ¹ .
Application received:	06 December 2019
Draft Certificate issued:	02 October 2020
First party representation received:	02 November 2020

1. Background to this report

The site is owned by the applicant and is located approximately 1.5km south of Castlerea in a rural area. The site extends over an area of 4.05 ha and is surrounded by agricultural lands, forestry and cutover peatlands. The site also borders with land drains which discharge into the Harristown Stream. There are a number of domestic dwellings to the north and southwest with the nearest located 280m north of the site. The landfill was operational from 1960 – 1999 and comprises of approximately 41,500 tonnes of municipal and commercial waste and sewage treatment sludge. Post remedial works, Roscommon County Council intend to use the site for agricultural purposes such as animal grazing.

The risk assessment has categorised the site as high risk (Class A) with the pollutant linkage identified as:

¹ Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 (S.I. No. 524 of 2008).

- Migration of the landfill leachate, via surface water drainage/run-off, to surface waters.

2. Consideration of the Representation

This report considers one valid first party representation from Roscommon County Council in relation to a number of requirements set out in the draft Certificate of Authorisation which are summarised below.

The representation should be referred to at all times for greater detail and expansion of particular points.

The Technical Committee (TC) comprising of Anne Lucey (Chair) has considered all the issues raised in the representation and this report details the Committee's comments and recommendations following the examination of the representation.

2.1 Condition 2.4 Environmental Liabilities

The applicant queries what financial provision is required considering the site is closed over 20 years, a risk assessment for the site has been undertaken and remediation works proposed. The applicant states that they will ensure that any contractor engaged will have adequate insurance in place to cover any incidents/accidents.

Technical Committee's Evaluation:

The TC considers it necessary that financial resources are provided for the remediation of the closed landfill and for any incident that may arise. For this reason and following consultation with the OEE Waste and Financial Provision Team, the TC proposes to amend condition 2.4 to account for this requirement. It is also recommended to remove the "Environmental Liabilities" header of condition 2.4 and to replace the financial references in the footer of condition 2 in the Certificate of Authorisation with "resources" to reflect the amended condition 2.4 appropriately.

Reason for Decision:

The Technical Committee propose to amend condition 2.4 and the footer of condition 2, and to delete the header of condition 2.4 as set out below, and has reached its decision having regard to the following reason:

- To provide financial resources for the remediation of the closed landfill and for any incidents that may arise.

Recommendation: Delete Condition 2.4 "Environmental Liabilities" header.

Amend Condition 2.4 to read as follows:

2.4 The local authority shall assign the necessary resources, including financial, to complete the remediation measures specified in the risk assessment or this Certificate of Authorisation and to respond to any incident.

Amend Condition 2 footer to read as follows:

Reason:	<i>To provide for the collection and reporting of adequate information on the activity. To provide for adequate resources for monitoring and measures to protect the environment.</i>
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2.2 Condition 3.1(b) "Install a low permeability landfill cap..."

The applicant states that tested samples of the existing cap were found to be suitable for use as landfill capping material and can be compacted to meet the non-hazardous landfill capping permeability requirements as set out in the "Updated Tier 2 and Tier 3 report". The applicant also refers to the capping requirements of another historic landfill site and contends that the same standard should be applied when considering the results of the tested samples and the low risk status of Castlereagh Historic Landfill.

Technical Committee's Evaluation:

The TC notes that the risk assessment categorised the site as high risk (Class A) due to the risk of migration of landfill leachate, via surface water drainage/run-off, to surface waters. The TC therefore considers the landfill cap to be of the utmost importance in minimising this risk and regards the comparison to the named low risk (Class C) site as not being comparable. Having regard however to the Landfill Restoration and Aftercare Manual², which advocates for the reuse of original soils on the site, the TC considers it appropriate to use the existing cap considering the testing carried out determined that it achieves the required hydraulic conductivity standard, as reported in the Tier 2 and Tier 3 Risk Assessment. It is therefore recommended to amend Condition 3.1(b) to allow for this equivalent cap.

Reason for Decision:

The Technical Committee propose to amend condition 3.1(b) as set out below and has reached its decision having regard to the following reason:

- To enable the use of an alternative cap that provides the equivalent hydraulic conductivity standard.

Recommendation: Amend Condition 3.1(b) to read as follows:

Install a low permeability landfill cap, minimum 1m, with 1mm thick low permeability geomembrane **or equivalent, to achieve** a hydraulic conductivity of less than or equal to $1 \times 10^{-9} \text{m/s}$;

2.3 Condition 3.1 "The local authority shall implement the following measures within 18 months..." and Condition 3.1(g) "...within six months of the date of grant of this Certificate of Authorisation, carry out a gas pumping trial..." and Condition 3.1(h) "...within one month...submit a report on the trial..." and Condition 3.5 "...the validation report shall be submitted...within 30 months of the date of grant of this Certificate of Authorisation."

The applicant states that timeframes specified may be an issue considering the gas pumping trials required, finalisation of the remediation proposal, planning consent requirements, preparation of tender documents, securing contractor(s) and securing of funding from DCCAE.

Technical Committee's Evaluation:

The TC acknowledges the factors identified by the applicant but considers it appropriate that a timeframe is retained within each condition to ensure that works are completed in a timely manner. In relation to condition 3.1, the TC notes that the condition contains the provision "...or

² EPA (1999) Landfill Manuals – Landfill Restoration and Aftercare.

as otherwise agreed by the Agency” in relation to the timeframe. However, the TC recommends that this timeframe is increased to 24 months having regard to the factors highlighted by the applicant and the extent of the measures required by condition 3.1. Consequently, it is recommended by the TC to also increase condition 3.1(g) by six months to allow adequate time for preparation works, contractor procurement and securing of funding. The TC recommends that an additional month is provided for the submission of the report on the gas pumping trial, under condition 3.1(h), to allow sufficient time to consider and propose the implementation of any recommendations to the Agency. Having regard to the timeframe increases for these conditions, the TC considers it appropriate to amend condition 3.5 to require the submission of the validation report within 36 months.

Reason for Decision:

The Technical Committee propose to amend condition 3.1, condition 3.1(g), condition 3.1(h) and condition 3.5 as set out below and has reached its decision having regard to the following reason:

- To provide an adequate timeframe for completion of all required measures.

Recommendation: Amend Condition 3.1 to read as follows:

3.1 The local authority shall implement the following measures within **24** months of the date of grant of this Certificate of Authorisation, or as otherwise agreed by the Agency:

Amend Condition 3.1(g) to read as follows:

3.1 (g) The local authority shall, within **twelve** months of the date of grant of this Certificate of Authorisation, carry out a gas pumping trial. Details of the proposed gas pumping trial shall be submitted for agreement by the Agency; and

Amend Condition 3.1(h) to read as follows:

3.1 (h) Within **two** months of the completion of the gas pumping trial, as required under Condition 3.1(g), the local authority shall submit a report on the trial to the Agency and seek agreement of the Agency regarding any recommendations arising from the trial and their implementation.

Amend Condition 3.5 to read as follows:

3.5 The local authority shall compile a validation report in accordance with the requirements of the Code of Practice. Unless otherwise agreed, the validation report shall be submitted to the Agency within **36** months of the date of grant of this Certificate of Authorisation.

2.4 Condition 3.1(c) “Install four gas vent pipes within the waste body...” and Condition 3.1(g) “...within six months of the date of grant of this Certificate of Authorisation, carry out a gas pumping trial...”

The applicant queries if the gas pumping trial identifies that gas venting is not appropriate.

Technical Committee’s Evaluation:

The TC notes that under condition 3.1(h) the applicant is required to “submit a report on the trial to the Agency and seek agreement of the Agency regarding any recommendations arising from the trial and their implementation”. In the event that gas venting is not appropriate, the applicant will be able to seek agreement from the Agency on an alternative proposal for landfill gas management at the site. For clarity and to ensure that condition 3.1(c) does not conflict with any potential alternative proposals, the TC recommends amending condition 3.1(c) to allow for the removal or alteration of the installed gas vent pipes in the event of alternative recommendations arising from condition 3.1(h). It is also recommended to provide the option for a cowl as well as

a fan within condition 3.1(c) to facilitate a passive or active gas management system as may be deemed appropriate.

Reason for Decision:

The Technical Committee propose to amend condition 3.1(c) as set out below and has reached its decision having regard to the following reason:

- To ensure an appropriate gas management system can be proposed and installed at the site.

Recommendation: Amend Condition 3.1(c) to read as follows:

Install four gas vent pipes within the waste body. The gas venting pipes shall meet the following requirements:

- (i) There shall be a fan **or cowl, as appropriate**, on each gas venting pipe;
- (ii) The gas vent pipes shall not be perforated above the ground level.

On agreement by the Agency, the gas vent pipes may be removed or altered in accordance with any recommendations arising from the trial in accordance with Condition 3.1(h).

2.5 Condition 3.8(b) Monitoring (sample, analyse, characterise, and measure the level) on a quarterly basis of leachate in all leachate monitoring boreholes;

The applicant states that no monitoring parameters are specified in relation to this condition.

Technical Committee's Evaluation:

The TC acknowledges that no parameters are specified within condition 3.8(b), however, the condition requires that leachate is sampled, analysed and *characterised*. This enables the applicant to establish suitable analytical parameters in order to determine the characteristics of the leachate being generated. The TC also notes that condition 3.8(f) requires the assessment of the monitoring results against standard reference values for relevant pollutants including environmental quality standards in the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended, and European Communities Environmental Objectives (Groundwater) Regulations 2010, as amended. For clarity, the TC recommends amending the condition to include a minimum number of parameters which must be analysed when completing monitoring. The parameters identified are intended to reflect the risks from migration of leachate into the surface water receptor as outlined in the site assessment report.

Reason for Decision:

The Technical Committee propose to amend condition 3.8(b) as set out below and has reached its decision having regard to the following reason:

- To provide for appropriate minimum monitoring parameters.

Recommendation: Amend Condition 3.8(b) to read as follows:

3.8 (b) Monitoring (sample, analyse, characterise, and measure the level) on a quarterly basis of leachate in all leachate monitoring boreholes. **The monitoring shall, as a minimum, include the following parameters: Biochemical Oxygen Demand (BOD) (mg O₂/l), Total Ammonia (mg N/l), Molybdate Reactive Phosphorus (MRP) (mg P/l) and Heavy Metals.**

2.6 Condition 3.17.2 The Communications Programme shall inform members of the public what they can and should do to protect their property and health.

The applicant states that there are no measures required to be taken by the public as the remediation measures proposed remove the risks identified.

Technical Committee's Evaluation:

The TC acknowledges the observation of the applicant but considers that the Communications Programme should inform the public on what they can and should do to protect their property and health when and if a risk to property and health arises e.g. in the event of an incident, an unmitigated risk or a failed remediation measure. The TC therefore recommends no change to condition 3.17.2.

Recommendation: No change.

3. Appropriate Assessment – Technical Committee Review

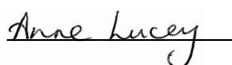
The TC has reviewed the Inspector's Appropriate Assessment in the Inspector's Report and, taking into account the representation received, and the content of this TC report, the TC is satisfied that the Inspector's Report provides an adequate examination and evaluation of the effects of the activities on the European Sites concerned, River Suck Callows SPA (Site Code: 004097), Corliskea/Trien/Cloonfello Bog SAC (Site Code: 002110), Bellanagare Bog SAC (Site Code: 000592), Bellanagare Bog SPA (Site Code: 004105), Cloonchambers Bog SAC (Site Code: 000600) and Drumalough Bog SAC (Site Code: 002338), in the light of their conservation objectives.

4. Overall Recommendation

It is recommended that the Board of the Agency grant a certificate of authorisation to the applicant

- (i) for the reasons outlined in the Draft Certificate of Authorisation,
- (ii) subject to the conditions and reasons for same in the Draft Certificate of Authorisation, and
- (iii) subject to the changes recommended in this report.

Signed


Anne Lucey

Date: 25 February 2021

Inspector
for and on behalf of the Technical Committee