

INSPECTORS REPORT

Waste Licence Register Number: 2-2

Applicant: Cork County Council

Facility: Ballyguyroe Landfill, Ballyguyroe North, Mallow, Co. Cork.

Inspector: Ms. Regina Campbell

Inspector's Recommendation: That a revised licence be granted subject to conditions.

(1) Introduction

This report relates to an application by Cork County Council for a review of the existing waste licence for Ballyguyroe Landfill (Reg. No. 2-1, issued on 22/12/99). Waste acceptance ceased at the landfill in September 2001 and final capping of the landfill was completed in 2002. Therefore, this application relates to the aftercare and restoration of the landfill. The main activities that will take place are the collection, storage and transport off-site of leachate, the monitoring and management of landfill gas and the monitoring of surface water, groundwater and leachate.

The facility, comprising approximately 6 ha of landfill divided into 7 cells, began operating in 1990. A total of 230,000 tonnes of waste was deposited at the facility prior to its closure in 2001. It is located in a rural location on the foothills of the Ballyhoura Mountains. The nearest residence is 400m to the north of the landfill.

The operation of the facility was the subject of proceedings brought by local residents in the High Court in 1997, concerning non-compliance with the Ministerial Certificate. This was settled by an agreement between parties (17/10/97). The main focus of the agreement was compliance with particular conditions of the Certificate. However, it was also set down that disposal activities should cease when Cell 7, which was under construction at that time, became full. This decision caused the life of the landfill to be significantly reduced.

Section 3 of this report details infrastructure put in place at the facility.

The principle amendments proposed in the review application to the existing waste licence (WL 2-1) are as follows:

1. To amend the classes of activities licensed.
2. To reduce the need for the facility to be manned on a daily basis to a weekly basis.
3. To amend monitoring requirements.
4. To be given the option of treating leachate using reed-beds at a future date.
5. To amend conditions relating to an operational landfill.

Section 2 of this report details the proposed amendments and the Inspector's recommendations.

The principal activity and classes of activity applied for are as follows:

- Waste Disposal Activities – 3rd Schedule (Classes 4 and 13); and

- Waste Recovery Activities – 4th Schedule (Classes 4 and 10).

The principal activity applied for is Class 4 of the 3rd Schedule.

The environmental impacts and associated mitigation measures at this facility were addressed in detail in the Inspector’s report that accompanied the Proposed Decision for the existing Waste Licence 2-1.

Recommendation:

It is recommended that the above activities, for which the applicant has applied for be licensed subject to the conditions outlined in the recommended Proposed Decision.

Appendix 1 contains a Site layout Drawing No. L2-1-9 entitled “Site Plan of Ballyguyroe Landfill Site”.

Quantity of waste for disposal applied for	None
Date application received	17/07/03
EIS Required	No
Number of valid submissions received	None
Recent facility visit	24/09/03 (David Shannon)

(2) Amendments to the Existing Licence Requested

The applicant stated the following principal reasons for the licence review:

1. **To amend the classes of activities licensed.** The applicant proposes that the principal class of activity at the landfill will be Class 4 of the Third Schedule. This relates to the storage of leachate generated by the landfill prior to removal off-site to Charleville wastewater treatment plant. Class 13 of the Third Schedule relates to the temporary storage of the leachate. Class 4 of the Fourth Schedule relates to the acceptance of inorganic material, other than waste, to fill depressions or undertake any other works required by the Agency. Class 10 of the Fourth Schedule relates to the spreading of waste on the site for the benefit of any agricultural activity with the prior approval of the Agency. I recommend that these activities be licensed.
2. **Reduce the need for the facility to be manned on a daily basis to a weekly basis** – the applicant stated that on the satisfactory completion of the leachate collection and gas flaring contract, that the need for a manned presence on site at all times will no longer be necessary. They propose that a weekly visit by a suitably qualified person to undertake monitoring of the facility is sufficient. I recommend

that the requirement to man the site daily is reduced to a minimum of two days a week. However this will only be with the prior agreement of the Agency and on the commissioning of the following infrastructure at the facility: permanent, automated leachate pumps, leachate lagoon high level liquid alarm, a continuous conductivity meter on the south drain and a landfill gas flare (see Condition 2.1 of the recommended PD). A remote call-out warning system is also required to be installed and this will operate in the event that a trigger level is exceeded (e.g. 0.75m freeboard in the leachate lagoon or 1000µs/cm conductivity in surface water drain) or equipment malfunctions. This requirement is necessary to ensure that the leachate and landfill gas management infrastructure is operating satisfactorily at all times when the facility is unmanned.

- 3. To amend monitoring requirements.** As the landfill no longer accepts waste and is finally capped, the licensee proposes to reduce the scope of monitoring. Further details are provided in the application. As part of the preparation of the recommended Proposed Decision, I have undertaken a general review of the scope of monitoring required and have incorporated changes into the recommended PD.
- 4. To be given the option of treating leachate using reed-beds at a future date.** The applicant requested that the option to treat leachate at a future date using reed-beds be included in the licence. This was proposed as an alternative to tankering leachate off-site. No information was provided on the treatment proposed and the licensee did not apply for the relevant class of activity (Class 6 of the 3rd Schedule). In response to a request for further information no extra details or clarification on this treatment option was provided by the applicant. Therefore I have not provided for this option in the recommended PD.
- 5. To amend conditions relating to an operational landfill.** The applicant summarises its status in relation to the conditions of the current licence and states which ones it feels are no longer applicable to a closed landfill. As part of the preparation of this recommended Proposed Decision, I have undertaken a general review of all conditions and have made amendments to take account of the fact that this landfill is now closed.

(3) Facility Development Status

The provision and maintenance of infrastructure at the facility is to be controlled by Condition 3 of the recommended PD. The main infrastructure at the facility include the final cap of Cells 1 to 7, a leachate storage lagoon, landfill gas collection infrastructure, office, weighbridge, wheelwash and a fire-water storage pond.

A new leachate storage lagoon has been built and this is to be commissioned in early 2004. Permanent and automated leachate collection pumps (powered by an air compressor), a high level liquid alarm in the new leachate lagoon, a continuous conductivity meter in the south drain, an enclosed flare and associated remote call-out

warning system are due to be commissioned in early 2004. Condition 5.5 sets a minimum freeboard of 0.75m in the leachate lagoon. In the event that the high-level liquid alarm is activated, leachate will cease to be pumped to the lagoon and a remote call-out warning system to a telephone number will advise of its status. It is proposed that in time the facility will not be manned on a daily basis and therefore a remote call-out warning system is necessary to minimise the risk of uncontrolled escape of leachate.

In 2002, 14,952m³ of leachate was tankered off-site and in 2003 (January – November) 10,238 m³ of leachate was tankered off-site. The new leachate lagoon has a capacity of 1,700 m³.

A landscaping programme was agreed by the Agency under the enforcement of waste licence 2-1. An update on the implementation of this programme is required to be submitted by Condition 4.1.

Monitoring locations and frequencies specified in the recommended PD in general reflect the current monitoring regime under the existing waste licence. Some amendments have been made to the monitoring requirements having regard to the changes in activities at the facility and having regard to any subsequent agreements made during the enforcement of the existing licence.

Condition 6.4 of the recommended PD requires groundwater monitoring trigger levels to be submitted to the Agency for agreement. Condition 6.5 sets a trigger level of 1000 µs/cm for conductivity in surface water run-off from the facility.

I consider that due to the cessation of waste activities at the landfill, the completion of all major infrastructural works (e.g. final capping) and the remoteness of the facility that dust and noise monitoring will not be necessary. Condition 7 requires that dust and noise do not cause a nuisance and Condition 8 requires that they be included in the weekly nuisance inspections.

(4) Licence History

No complaints have been received by the Agency in relation to the facility in 2003.

The most recent notification of non-compliance issued related to an audit undertaken by the Agency in July 2003. The non-compliances related to the wording of the site notice-board, fuel storage and a depression in the final cap of Cell 7. At present there are on-going incidences relating to the presence of methane in perimeter landfill gas monitoring boreholes on the facility. Cork County Council have said that they plan to have the landfill gas flare installed in early 2004 and that this should prevent further gas migration occurring.

(5) Waste Management, Air Quality and Water Quality Management Plans

Cork County Council adopted their Waste Management Plan in September 2001. The Plan states that Ballyguyroe Landfill Site is one of six landfills in the Cork County Council area to be subject to a waste licence application. It indicates that Ballyguyroe will operate for a limited time as required by the High Court Agreement.

There is no relevant Water Quality Management Plan for the nearby Farahy River catchment and no relevant air quality plan for the region exists.

(6) Other issues

Extra information was submitted by Cork County Council on the 22/09/03. This information contained a copy of correspondence received by the Council from Mr. John Geary and also a copy of the agreement made as part of the High Court Settlement in 1997. Mr. Geary is the plaintiffs representative to the Monitoring Committee established by agreement as part of the High Court Settlement. In his letter to Cork County Council, Mr. Geary requested clarification on Class 10 of the Fourth Schedule, the proposed treatment of leachate using reed beds and the proposed groundwater monitoring. He said that these issues would be discussed at the next meeting of the Monitoring Committee on the 16th September 2003. No further correspondence on the matter was received by the Agency.

There are two proposed Special Areas of Conservation in the vicinity of the landfill. One lies directly to the north and northwest of the site and the other approximately 4km to the northeast of the facility.

(7) Submissions

No submission was received in relation to this application.

(8) Recommendation

I recommend that a revised waste licence be granted in accordance with the conditions in the recommended Proposed Decision.

In coming to this recommendation, I consider that the continued restoration of the facility and the associated activities and works would, subject to the conditions of the recommended Proposed Decision, comply with the requirements of Section 40(4) of the Waste Management Act 1996.

Signed: _____
Ms. Regina Campbell, Inspector
Office of Environmental Enforcement

Dated: _____
6/01/04

Appendix 1

Site layout Drawing No. L2-1-9 entitled “Site Plan of Ballyguyroe Landfill Site”