



epa

Environmental Protection Agency
An tAidmhaireacht do Chaomnú agus Cosaint na n-Éirí

Mr. Kieran Coffey,
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20th April 2010

**Re: Certificate of Authorisation Application for Newmarket Landfill
Application No. H0001-01
Request for further information in accordance with Regulation 7(4) of Waste
Management (Certification of Historic Unlicensed Waste Disposal and Recovery
Activity) Regulations, 2008**

Dear Mr. Coffey,

I am to refer to the above referenced application for a Certificate of Authorisation with respect to Newmarket Landfill and to your Regulation 7(4) response, received by the Agency on 7th April 2010.

The Agency is not satisfied, based on the information provided in the application, that there is a sufficient basis for reducing the risk category for this site from Moderate to Low Risk. As such, the Agency requested the further information outlined in Regulation 7(4) notification dated 15th March 2010, in order to establish that this category reduction is appropriate.


The Agency requests that additional monitoring and sampling be carried out as requested in the Regulation 7(4) notification dated 15th March 2010. The additional leachate borehole sampling should be carried out following a period of rainfall sufficient to establish the potential for leachate formation within the waste body.

Following the submission of the additional monitoring and sampling results, together with any revised SPR linkages, the Agency will assess whether any additional works (such as further trial pitting) is required.

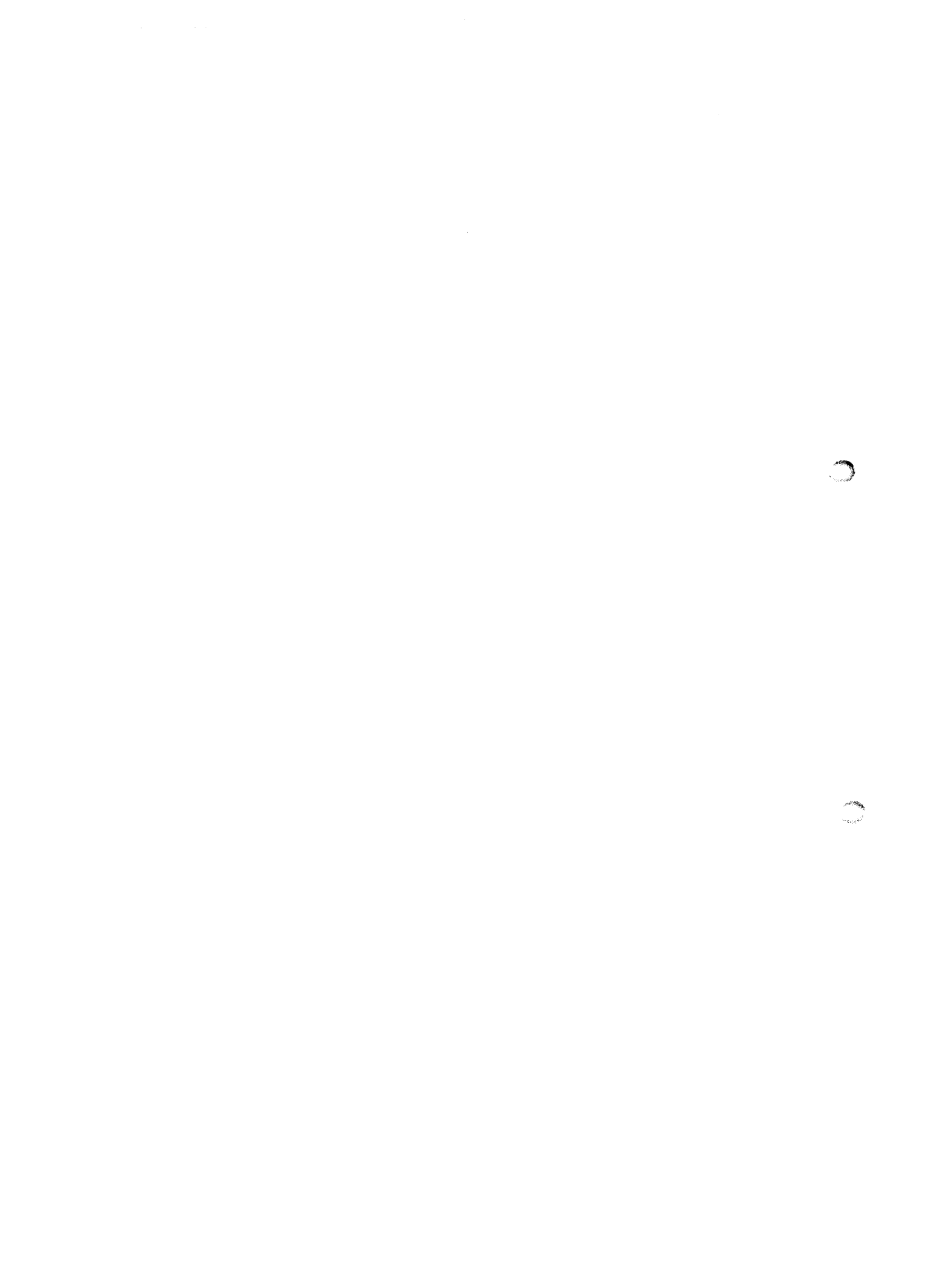
Please supply the information in the form of one original plus one copy within *eight weeks* of the date of this notice. In addition, please submit one copy of the requested information in electronic searchable PDF format on a CD-ROM to the Agency. Please note that all maps/drawings should not exceed A3 in size.

Please note that the application's register number is H0001-01. Please direct all correspondence in relation to this matter to *Administration, Environmental Licensing Programme, Office of Climate, Licensing & Resource Use, Environmental Protection Agency, Headquarters, PO Box 3000, Johnstown Castle Estate, County Wexford* quoting the register number.

Yours sincerely,


Caroline Kelly

Inspector
Office of Climate, Licensing and Resource Use



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15th March 2010

**Re: Certificate of Authorisation Application for Newmarket Landfill
Application No. H0001-01
Request for further information in accordance with Regulation 7(4) of Waste
Management (Certification of Historic Unlicensed Waste Disposal and Recovery
Activity) Regulations, 2008**

Dear Mr. Coffey,

I am to refer to the above referenced application for a Certificate of Authorisation with respect to Newmarket Landfill. Having examined the foregoing, the Agency requests the following further information, in accordance with Regulation 7 (4) of the abovementioned regulations:

1) Appropriate Assessment:

Please carry out screening to determine if an appropriate assessment is required in accordance with Article 6(3) of the Habitats Directive (92/43/EEC). Where it has been determined through screening that an appropriate assessment is required, complete the Appropriate Assessment and forward a copy of the report on this assessment. The assessment should consider the following impacts on the designated site:

1. The impact of the existing landfill
2. The objectives of proposed remediation measures with regard to existing impacts identified in item 1.
3. The impact of any physical works carried out at the site as part of the remediation plan.

Please refer to the NPWS guidance document '*Appropriate Assessment of Plans and Projects in Ireland*' with regard to this assessment.

2) Leachate sampling and testing

It is noted that leachate boreholes were sampled over a short three week period during late June to early July 2008. The Agency requests that further monitoring be carried out in order to verify that the reduction of risk categories for SPR 8 and 9 from Moderate to Low is appropriate. As such, the Agency requests the following:

- a) Boreholes on site should be sampled again for leachate. Where leachate is present, a comprehensive suite of analysis should be carried out, as per the EPA Landfill Manual on Landfill Monitoring (2nd Edition, 2003), or equivalent.
- b) If no leachate is present, the leachate potential of the waste should be determined by additional trial pitting, to allow for leachability testing of the waste. Leachability testing should be carried out in accordance with the UK NRA document '*Leaching tests for assessment of contaminated land: Interim NRA guidance. National Rivers Authority R&D Note 301. (1994)*', and the results compared to the relevant thresholds under the EPA guidance document '*Towards setting guideline values for the protection of groundwater in Ireland*' and the European Communities Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010).

3) **Underlying clays and bedrock**

The Tier II investigation does not indicate that the native clays underlying the waste materials and overlying the bedrock are sufficiently thick or of such a permeability to provide an effective barrier layer to potential leaching to the underlying aquifer. In the absence of specific information on this layer, the Agency requests that additional groundwater monitoring to be carried out for indicator or previously elevated parameters to confirm the initial sets of results for groundwater quality.

4) **Surface Water monitoring:**

The Agency requests that further surface water sampling be carried out on the adjacent water body to assess the potential for leachate impact on the hydrological system at and around the site. Additionally, biological sampling for Q-Values upstream and downstream of the site should be carried out, however, it may be that this will be carried out as part of an Appropriate Assessment (where this has been deemed necessary through screening).

5) **Review of SPR Linkages and refinement of Conceptual Site Model (CSM)**

Based on the results of the further monitoring requested in items 2 to 4 above, the revised SPR linkages determined on foot of the original Tier II investigations will need to be re-examined. If leachate potential exists, then a Quantitative Risk Assessment (Tier III) should be carried out.

After completion of a Quantitative Risk Assessment, a revised remediation plan should be completed. Details of all necessary measures proposed must be provided, including a statement of the impact of the remediation measures. Proposed measures must clearly address all risks identified in the revised CSM for the site. This should also include details of alternative remediation measures considered and reasons for the rejection of same, where applicable.

Where it is determined that a Quantitative Risk Assessment is not required (as no leachate potential has been determined to exist), then further information is requested on the original remediation proposal. Details of all measures proposed must be provided, including a statement of impact of these measures. This should also include

details of alternative measures considered and reasons for the rejection of same. In particular, please provide reasons why a thicker cap and/or impermeable membrane is not proposed. The proposed measures (e.g. capping depth) must be fully justified in the context of the risks identified in the revised CSM.

6) Validation Report and further monitoring

A schedule for the completion of the necessary measures should be included as part of the remediation plan, including a timeframe for the preparation, finalisation and submission of a validation report.

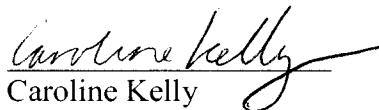
The remediation plan should also detail any further monitoring required into the future to evaluate the effectiveness of the remediation measures carried out.

In the case where any drawings already submitted are subject to revision consequent on this request, a revised drawing should be prepared in each case. It is not sufficient to annotate the original drawing with a textual correction. Where such revised drawings are submitted, provide a list of drawing titles, drawing numbers and revision status, which correlates the revised drawings with the superseded versions.

Please supply the information in the form of one original plus one copy within *eight weeks* of the date of this notice. In addition, please submit one copy of the requested information in electronic searchable PDF format on a CD-ROM to the Agency. Please note that all maps/drawings should not exceed A3 in size.

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Yours sincerely,



Caroline Kelly

Inspector

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