

Mr. Cathal Brodie,
Executive Scientist,
Department of Physical Development – Environment Section
Clare County Council,
Áras Contae an Chláir,
New Road,
Ennis,
Co. Clare.

27th January 2022

Reg. No. H0035-01

Re: Whitegate Landfill – Notice in accordance with Regulation 7(4) of the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations, 2008

Dear Mr. Brodie,

I am to refer to the above referenced application for a certificate of authorisation in relation to the above referenced historic landfill.

Having examined the foregoing, I am to advise that the Agency is of the view that the application does not comply with Regulation 7(2) of the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations, 2008.

You are therefore requested in accordance with Regulation 7(4) of the Regulations, to take steps to supply the information detailed below:

REGULATION 7(2) COMPLIANCE REQUIREMENTS

1. The site boundary shown on the map in the *Risk ranking report for Whitegate Landfill* dated 28/07/2009 and in Figure titled ‘Figure 2.2 Site Layout’ of the Tier 3 Assessment differ. State the reason for the differences in the extent of the site boundary in said map and figure and submit, or refer to, a map/figure that shows the actual site boundary.
2. The Non-Technical summary and Section 2.4 of the Tier 3 Assessment state that the site covers 8ha, however, the map and figure referred to in Point 1 indicate that the site is smaller. State the size of the overall site, within the site boundary, in hectares.
3. Section 2.4 of the Tier 3 Assessment states that only c1.1ha was used for landfill. Section 4.2 of the Tier 3 Assessment states that waste is present across ‘the entire 1.19ha landfill area’. State the extent of the waste body in hectares.
4. Ten trial pits were excavated, as shown in Figure 3.1 ‘Trial Pit Location’ of the Tier 3 Assessment. Provide the following information:

- (i) State the reason for not installing trial pits in the centre of the waste body and explain how, in the absence of trial pits, the type and depth of waste in this location was determined.
 - (ii) Considering that waste containing sand and rubble was detected in trial pit T6, provide a reason for not including this location within the site boundary.
 - (iii) Section 3.3 of the Tier 3 Assessment states that it is more likely that water observed in the trial pits was perched water in the waste mass and not groundwater. Section 3.3.3 of the same document states that ‘perched water/leachate’ was present in most of the trial pits. State whether water observed in the trial pits was leachate, perched water table or main water table of the underlying aquifer.
5. Referring to Figure 3.3 ‘Surface Water Sampling Points’ of the Tier 3 Assessment, provide the following information:
 - (i) State whether the blue oval shape, that is connected to the monitoring location SW6 with a blue line is a wetland or a lake, as it is noted that no waterbody appears on the EPA GIS mapping system (<https://gis.epa.ie/EPAMaps/>) at this location. Provide a name for this waterbody if known.
 - (ii) It is noted that there is no waterbody marked at surface water monitoring location SW10. Please submit a new figure showing the surface water monitoring locations and the associated waterbodies. Each waterbody should be shown in blue and be annotated.
6. The surface water and groundwater laboratory results in Appendix 4 of the Tier 3 Assessment refer to Samples Ref. 21-0289 to 21-0294 and Samples Ref. 21-0390 to 21-0394. Provide the corresponding monitoring reference points to these samples, as referred to in the Tier 1/2/3 Assessment, i.e. SW1, SW2 etc.
7. It is noted that leachate samples collected from four trial pits, and analysed on 5th November 2009, may not reflect the current status of the landfill due to sample age and due to all sample locations being close to the edge of the waste body only. Accordingly, please install leachate monitoring boreholes within the waste body and carry out up-to-date leachate monitoring from these boreholes. The monitoring boreholes should be located taking into account the likely flow-paths of leachate within the waste body in accordance with the EPA Landfill Manuals – Landfill Monitoring.
8. It is noted that gas monitoring using impact searcher bars, was carried out at six locations in 2008 and one location on 5th November 2009. It is considered however, that gas monitoring using impact searcher bars may not be reflective of the actual gas concentrations within the waste body which is noted as reaching 5m in thickness. Accordingly, please install gas monitoring boreholes within and outside the waste body and carry out up-to-date gas monitoring in accordance with the EPA Landfill Manuals – Landfill Monitoring. Please note, as per Section 7.5.2 of EPA Landfill Manuals - Landfill Monitoring, that for gas monitoring purposes within the waste body, leachate monitoring boreholes are inappropriate and, where appropriate, groundwater monitoring boreholes may be used for gas monitoring.
9. It is noted that groundwater was monitored at three wells in 2009 and two wells on 24th March 2021 and 24th April 2021. It is noted however, that the nearest well is located 840m north-east of the site and there are other sources of potential contamination between the landfill and the said wells, as indicated in Section 3.4.2 of the Tier 3 Assessment. Accordingly, please carry out the following:
 - (i) Install at least three groundwater monitoring boreholes outside the waste body and at a distance which is representative of any potential impact the landfill may have on groundwater, one of which shall be upgradient of the waste body and two of which shall be downgradient of the waste body; and
 - (ii) carry out groundwater monitoring at these boreholes.

10. Please provide one drawing showing all of the following elements interpolated:
 - (i) the site boundary in red;
 - (ii) the boundary showing the extent of the waste body, in a different colour than red; and
 - (iii) all leachate, groundwater, gas and surface water monitoring locations.
11. State whether hazardous waste was deposited within the landfill. Classify any such waste in accordance with *EPA Waste Classification, List of Waste & Determining if Waste is Hazardous or Non-hazardous, applicable from 5th July 2018*.
12. Figure 5.3 'Landfill Capping Detail' of the Tier 3 Assessment indicates that the proposed landfill cap will comprise of a 500mm thick compacted soil layer. However, Figure 5.4 'Landfill Gas Ventilation Pipe' of the same document indicates the compacted soil layer will be 1,000mm thick. State the thickness of the proposed compacted soil layer and include a new Figure showing the proposed cap and its thickness.
13. Section 5 of the Tier 3 Assessment refers to a surface water drainage layer as one of the remedial measures for the landfill. Provide information on the design of this layer and state the discharge point(s) for the surface water collected by this layer. Include a drawing showing this layer and its discharge point(s).
14. State the proposed use of the site.

Your reply to this notice should include a revised non-technical summary, which reflects the information you supply in compliance with the notice, insofar as that information impinges on the non-technical summary.

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. The revision status, such as revised drawing number and/or revision date should be clearly stated. Also, 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 requested information within ***eight weeks*** of the date of this notice. Please note that during Covid-19 there are new arrangements in place for the receipt of all correspondence in relation to applications for Certificates of Authorisation. Accordingly, any correspondence in respect of the above referenced application should be sent to the Agency via file transfer by emailing historiclandfillapplications@epa.ie, quoting the Register Number H0035-01. The EPA doesn't accept files to be transferred using any file share application other than MS One Drive. Each file should be in a searchable .pdf format and a size not exceeding 10MB.

Please also note, post Covid-19, you may be contacted to submit the hard copies and CD-ROMs for the submitted electronic correspondence.

Yours sincerely,



Ewa Babiarczyk
Inspector
Circular Economy Programme
Office of Environmental Sustainability