

Comhairle Contae Chill Dara Kildare County Council



Administration
Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Headquarters
PO Box 3000
Johnstown Castle Estate
County Wexford

10th February 2021

Reg. No. H0209-01

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

Please see responses below numbered as per your original request for information.

1. Kildare County Council records show that the site was used as a refuse depot from 1st January 1981 to 2nd February 1982. Our records do not show any waste disposal outside of these dates.
2. The basis for the statement *there is no evidence of waste underneath the hotel* was from a review of the original Planning Application for the hotel and statements contained therein from Architect and Consulting Engineer that no buildings are being located inside the footprint of the landfill.
3. Drawing No. 15 shows the boundary of the whole site as per the Tier 1 risk assessment.
4. Drawing No. 15 shows the correct site boundary.
5. The gas monitoring events indicated no flow. As stated in Section 7.5 of the Environmental Assessment:
The flow rate indicates the level of gas movement through the permeable layers. The purpose of measuring gas flow rates is to predict surface emissions and from these deduce the potential for gas ingress into buildings (CIRIA, 2007). The flow rate indicates the level of gas movement through the permeable layers. Furthermore, surface emission rate measures the potential for gas to escape from a particular area on the ground. The very low flow rates observed, and the results of the VOC monitoring surveys, on and off-Site and within the hotel building, demonstrated that the imported material is not actively generating landfill gas and it is therefore not migrating vertically or laterally. Therefore, it would not affect any potential receptors (on or off-site).
In addition, Section 8.2 of the Environmental Risk Assessment states:
The linkages of greatest concern according to the preliminary conceptual site model include the risk of landfill gas migration to off-site receptors (SPR10) and the risk of landfill gas migration to onsite receptors (SPR11). These linkages reported a normalised score of 42% in both cases. As described in section 7.5, due to the site location, the low flow rates observed in all monitoring locations and the findings of the VOC monitoring surveys inside and outside the site boundary and within the hotel building, it can be concluded that the observed landfill gas concentrations do not pose a risk to human health or the environment and that the pollutant linkages SPR10 and SPR11 are no longer valid.
Accordingly, a gas venting system is not proposed for the site.

6. There is a surface water system in place for the Hotel and associated hard standings, no further surface water management run-off management system or infrastructure is proposed.
7. As stated in Section 7.2 of the Environmental Risk Assessment:
The elevated concentrations of a number of parameters identified in the leachate were not identified in any of the groundwater and surface water results, with the exception in arsenic at GW1A (downgradient well), refer to section 7.3. Therefore, it is reasonable to assume that the leachate generated due to the imported material is not migrating downwards or horizontally and therefore will not pose a risk to the underlying aquifer or any identified receptors.
Accordingly, there is no leachate management system or associated infrastructure proposed.
8. Please see attached updated Drawing No. 15 Rev A titled 'Site Investigation Locations – REV A' showing the location of soil permeability sample GW04.
9. An engineered cap is not proposed for the site because, as stated in Section 9 of the Environmental Risk Assessment:
The capping material encountered during the site investigations (trial pit) was identified as brown gravelly clay with a thickness of 0.6 to 1.4m. According to the geotechnical results the capping material was classified as brown very gravelly very sandy CLAY, with low permeability 4.9×10^{-9} m/s. The low permeability of the capping material overlying the imported material would impede rainfall infiltration and therefore reduce the generation of leachate.
Also, as stated in Section 12 of the Environmental Risk Assessment:
The CoP requires that suitable remedial measures are discussed depending on the results of the QRA. As stated in the previous Section 11, the Site has been well characterised and it has been concluded that the Site, in its current status, does not require any further actions, hence no remedial measures are proposed.
10. The site is currently used as a hotel with associated car park and an animal grazing area. The site is not currently intended to be used for other purposes. Should any other purpose be proposed in the future it would be subject to Kildare County Council's planning procedures and in accordance with Section 12 of the Environmental Risk Assessment: *It is critical...that if there is a proposed change in land-use then a re-appraisal of the risk, based on detailed site investigations, shall be carried out.*

The information supplied in compliance with the notice does not impinge on the non-technical summary. Accordingly, a revised non-technical summary is not included.

Yours Sincerely,



Micheál MacGiollaCoda
Executive Engineer

Encl. Drawing No. 15 Site Investigation Locations - REV A
PRUSSELSTOWN LANDFILL Drawing List

Drawing List

Drawing No.	Drawing Title	Status
Drawing 1	Subsoils	D
Drawing 2	Bedrock	D
Drawing 3	Bedrock Aquifer	D
Drawing 4	Sand and Gravel Aquifer	D
Drawing 5	Groundwater Vulnerability	D
Drawing 6A	Groundwater Flow Direction – April 2019	D
Drawing 6B	Groundwater Flow Direction – May 2019	D
Drawing 7	Groundwater Wells within 2km of the Site	D
Drawing 8	Hydrological Receptors	D
Drawing 9	Groundwater Source Protection Areas (SL/SO)	D
Drawing 10	Special Areas of Conservation	D
Drawing 11	Proposed Natural Heritage area	D
Drawing 12	Trial Pit Locations	D
Drawing 13	Leachate/Gas Well Locations	D
Drawing 14	Groundwater Well Locations	D
Drawing 15	Site Investigation Locations - REV A	Rev. A
Drawing 16	Surface Water Locations	D
Drawing 17	Surface VOC Survey Locations	D
Drawing 18	Approximate Extent of the Waste	D
Drawing 19	Conceptual Site Model	D



Legend

- Site Boundary
- Trial Pit Locations
- Leachate Well Locations
- Groundwater Well Locations
- Soil Sample - Capping Layer



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Client Kildare Co Co			Drawing			
Job Environmental Risk Assessment			Site Investigation Locations – REV A			
Job No. E1506	Drawing Number 15 – REV A	Status DRAFT	Sht. Size A3	Scale 1:10,000	Date June 19	Drawn NM