



**OFFICE OF CLIMATE,
LICENSING &
RESOURCE USE**

MEMORANDUM

TO:	DIRECTORS
FROM:	Ian Marnane
C.C:	
DATE:	3 rd September 2007
RE:	Fingal Landfill Waste Licence Application, W0231-01. Consideration of additional submissions, Submission No. 98 – 107.

Submission No. 98 – Deaglan De Faoite on behalf of Nevitt Lusk Action Group

This submission includes a letter and a DVD.

The DVD includes video recordings of well heads around the site area and also video footage of the river draining the Bog of the Ring area and the outfall from this river into the sea at Balbriggan. A small stream running through the centre of the proposed landfill site is also presented. The video footage of the well heads is presented as evidence of the groundwater level at these wells. Mr. De Faoite estimates the depth of water below ground level from visual inspection of the wells. Review of historical data for the same wells indicates that the levels estimated by Mr De Faoite are similar to the historical data, with perhaps (again, based on the visual estimates provided) slightly higher water levels than would be expected at this time of year due to the higher than average rainfall which has occurred over the summer months. The only significant exception is well PW2 where the water level in the well casing was close to ground level, while monitoring data suggests water levels of approximately 6 metres below the top of the casing. However it is noted that the video indicates no visible standpipe in the centre of the well, hence the observed level may not be representative of the actual water level in the bedrock (the borehole log for PW2 indicates the standpipe is screened in the bedrock only).

The letter raises a number of points in relation to the well survey carried out for the EIS and presents information on local wells and yields. The impact of local wells on the classification of the area as regards the GSI/EPA/DEHLG risk matrix has been discussed in the IR.

The letter also raises a number of other issues which have already been discussed as part of the Inspectors Report and are not discussed further here.

Submission No. 99 – John Keely

Mr Keely raises points in relation to the importance of the local agricultural industry and the water supply to this industry. Other points raised include the impact on the local school, the Bog of the Ring water supply, site archaeology, local air quality, pest populations and local bird populations. Mr Keely also refers to Irish and EU waste policy and the existing waste body at the Nevitt site. Remediation of the existing landfill area is required as part of the PD.

The submission raises no significant new issues and therefore the topics raised have previously been considered as part of the IR and are not considered further here.

Submission No. 100 – Bernadette Lunney

Ms. Lunney raises a number of points relating to: local flora and fauna, groundwater pollution, the local farming industry, the properties of landfill leachate, and increases in traffic volumes. These issues have been considered previously and are not discussed further here.

Ms. Lunney provides information gathered, including:

- Webpage on risk from landfill facilities in the USA, from the Northwest Indiana University. There is a general discussion of the risk associated with landfilling waste and the potential for leakage of leachate to contaminate groundwater. The issue of groundwater contamination due to leakage at the Nevitt site has been discussed in the IR. The webpage also refers to evidence of health impacts in the vicinity of hazardous waste landfills. I do not consider that the information from this webpage adds any additional information to the overall consideration of the Nevitt landfill application as per the IR.
- A re-evaluation of the traffic impact assessment presented in the EIS which includes traffic from developments not considered in the EIS, and also a list of questions from the planning application oral hearing. The issue of traffic and consideration of traffic impact as part of the Waste Licence application process is discussed in the IR.
- A press release from Fingal County Council relating to the launch of a 'Water Matters' booklet by the Eastern River Basin District Project Team, which deals with the requirements and challenges of the Water Framework Directive. The WFD was taken into consideration in drafting the IR and RD.
- Information from Fingal County Council on designated habitat areas. Such areas were considered as part of the IR.

Submission No. 101 – Deaglan De Faoite on behalf of Nevitt Lusk Action Group

Mr. De Faoite's submission refers to the Environmental Liability Directive and how this would relate to the development of the landfill, as he considers that the ELD may require the future remediation and removal of the landfill body. Any future contamination of the local groundwater would also result in members of the local horticultural industry and also local residents, whose health may be impacted, claiming damages. Mr. De Faoite considers that EU fines may also be imposed as well as costs for cleaning the groundwater. Mr. DeFaoite estimates the total cost at 1,000 million euro.

Mr. DeFaoite submitted a copy of the recent 'Environmental Liability Screening Regulatory Impact Analysis' issued by the DEHLG in July 2007. This is a discussion document in relation to the transposition of certain parts of the ELD into Irish legislation. There are various discretionary provisions (e.g. 'permit defence' where permitted facilities are exempted in the event where an impact was caused despite the site operating within the terms of the permit) in the ELD which may or may not be implemented through national legislation, however this has yet to be decided and the regulatory impact analysis invites submissions from interested parties. Until such time as the directive is transposed, the nature of the discretionary provisions adopted will not be known. Irrespective of this, the principles of the ELD have been taken into account in developing the conditions in the RD, and in particular the requirement for the preparation of a detailed Environmental Liabilities Risk Assessment (ELRA) prior to the commencement of the activity. This ELRA must be reviewed on a regular basis. Furthermore, financial provisions must be provided for any potential liabilities which are identified. The RD reiterates the fact that the licence would not negate the licensee's statutory obligations or requirements under any other enactments or regulations. Hence the facility will be subject to the requirements of the Irish transposition of the ELD.

Submission No. 102 – Gemma Larkin

Ms Larkin presents information relating to reduction in the quantity of waste going to landfill in 2010 to 75 % of that sent to landfill in 1995, which would equate to 1.04 million tonnes in 2010. She reports 2.1 million tonnes of waste going to landfill in 2006 and suggests that the reason for the increase in waste to landfill is due to oversupply of landfill capacity. Ms Larkin asks whether the granting of a licence will promote the use of landfill.

The issue of national waste policy is discussed in the IR and is therefore not investigated further here. The RD requires that only residual waste be accepted at the landfill, thus requiring diversion of other waste streams such as dry recyclables and biodegradable waste from the landfill.

Submission No. 103 Withdrawn and Replaced with Submission No. 107

Submission No. 104 – Celine Blake on behalf of Nevitt Lusk Action Group

Ms Blake refers to a number of issues in her submission, including:

- Contamination of the underlying aquifer;
- Emissions from the landfill due to factors including leaks, fires, explosions, chemical breakdown, slope instability;
- Impact on horticulture industry;
- Quality of information on local wells and horticulture industry;
- Sustainability of the landfill;
- Impact on local ecosystems;
- Quality of life for local people;
- Climate change impact of landfills;

The submission does not raise any issues which have not already been discussed in the Inspectors Report and/or in responses to other third party submissions and therefore these issues are not dealt with further here.

Ms. Blake also refers to the 'precautionary principle'. The precautionary principle has been taken into account in drafting the conditions in the RD.

Submission No. 105 – Returned to Submitter

Submission No. 106 – Shay Lunney

Mr. Lunney submitted an e-mail raising the point that 16 potentially suitable sites were identified as part of the site selection process for the landfill, and states that 'the availability of the other short listed sites must be considered rather than addressing the Nevitt site as the one and only site considered to be suitable by (rpsmcos). So the imminent threat to the environment must not be permitted to take place at this site when there are other so called suitable sites available'.

The site selection process was reviewed as part of the assessment of the licence application, and was determined to be satisfactory. The Nevitt site was determined to be the most suitable site of the identified sites and was thus identified for further evaluation in terms of preparing an EIS document and in completing the licence application document.

As discussed in the IR, the RD includes a wide range of conditions which have been developed to prevent any significant impact due to the operation of the landfill.

Submission No. 107 – Patrick Boyle on behalf of Nevitt Lusk Action Group

Mr Boyle indicates that the response by the applicant to a previous request for information from the Agency in relation to 'Base and Slope Stability and Dewatering Requirements' was inadequate.

Mr. Boyle seeks to invoke the precautionary principle in order to request the EPA to require the applicant to submit further information on the issues of stability and dewatering requirements.

It is noted that the precautionary principle is generally invoked where a number of specific preliminary conditions are met, including:

- Identification of potentially adverse effects;
- Evaluation of the scientific data available;
- The extent of scientific uncertainty.

It may be considered that stability problems in a landfill would result in potentially adverse effects, hence the first condition is met, assuming a significant effect would occur.

In relation to the evaluation of scientific data available, it is noted that prior to development of the facility the licensee would be required to submit a detailed 'Specified Engineering Works' document to the Agency for approval. This includes requirements for submission of stability calculations. The programme of works must be approved by the Agency prior to any work commencing. This information will be available for public inspection. The licensee would then also be required to carry out an annual slope stability assessment.

Furthermore, on the third of the preliminary conditions detailed above, the extent of scientific uncertainty is considered to be low, as the types of geotechnical issues expected at the site are well known and understood, and common techniques exist to manage any issues likely to arise.

Mr. Boyle also submits excerpts from a 1983 document published by the US Departments of the Army, the Navy and the Air Force 'Dewatering and Groundwater Control'. This document provides useful guidance on dewatering and groundwater control techniques for minimising stability problems. Mr. Boyle refers to specific recommendations and issues covered in the report with regard to groundwater control. The points Mr. Boyle refers to may be relevant considerations in the detailed design of any dewatering systems required for the proposed landfill and would be expected to be taken into account, as required, in the 'Specified Engineering Works' document which must be submitted to the Agency for approval. Mr. Boyle states that the design of a dewatering system should take into account the risk of damage to the environment should the dewatering system fail. The design details of the dewatering system will be reviewed by the Agency as part of the assessment of the specified engineering works document. The RD also requires the preparation of an Emergency Response Procedure to address any emergency situation which may originate on site. This procedure is required to be prepared prior to commencement of the activity.

Mr Boyle indicates that water extracted from the dewatering system would potentially impact the receiving waters as it may be discharged directly to the local river system. However, the RD does not permit any such discharges. Groundwater from the drainage system must be passed through the attenuation system prior to discharge.

Mr. Boyle states that no allowance is made by the applicant for the known wells and springs in the area. Such information would be required to be taken into account in the specified engineering works document.

Mr. Boyle requests full disclosure and a right to reply to all slope stability and dewatering plans. The specified engineering works documents will be submitted to the Agency prior to commencement of excavation works at the site and this document will be publicly available. However, it is not considered that the detailed design information needs to be submitted at the application stage.

Submission No. 108 - Shay Lunney on behalf of Nevitt Lusk Action Group

Mr. Lunney submitted a video tape recording of the RTE programme 'Ear to the Ground' which was televised in late 2006, and a recording of a radio programme from LMFM which included a piece on the proposed development of the landfill, including an interview with a representative from Fingal County Council and interviews with local residents and representatives.

Mr. Lunney also submitted a copy of a circular letter from the DEHLG regarding the provisions of the European Communities (Drinking Water) Regulations 2007 (S.I. No. 106 of 2007).

Mr Lunney refers to the ragwort weed which is poisonous to animals, and reports that disturbance of clay encourages the spread of the weed. Considerable disturbance of clay is planned as part of the development of the landfill. I note the point raised by Mr. Lunney however this would also be the case with disturbance of any land, including farm land. Ragwort thrives more on lighter free draining soil rather than on clay soils, and control measures are available for this weed. However, it is acknowledged that this issue may need to be monitored as part of the ecological monitoring required by Condition 6.12 of the RD. Remedial actions can be included in the Environmental Management Plan if necessary. The requirement for control of 'noxious weeds', including ragwort, by landowners is specified under the 'Noxious Weeds Act 1936'. Under the act it is an offence to allow these weeds to proliferate, hence control measures will be required at the site. Recent press releases from the Department of Agriculture have reminded land owners and occupiers of the importance of complying with this act.

Mr. Lunney also raises points in relation to groundwater contamination due to operation of a landfill and the potential impact on the agricultural industry. As this has been discussed in the IR no further discussion is included here.

Mr Lunney also comments on the content and statements made by individuals in the radio interview and television programme. I have watched the television programme and listened to the radio excerpt and considered any additional information raised. There is no additional technical or environmental information which I consider would impact on the RD as drafted.

Overall Recommendation:

The RD as drafted and submitted to the board on 26/06/2007 caters for the additional third party submissions made after that date. Therefore, no changes to the RD are considered necessary.

Signed:

Ian Marnane