

Ground 1: Condition 3.11.1 (Landfill Liner)

The Council requests that the thickness of the liner specified in Condition 3.11.1 (a) be changed from 2mm to 2.5mm for the reasons that the HDPE liner used in the landfill lining system at Arthurstown has a thickness of 2.5mm. The Council also request that provisions for alternatives to be agreed with the Agency should be included at the start of Condition 3.11.1 for the reason that alternatives to the elements of the liner as described have been previously constructed with the agreement of the Agency.

Technical Committee's Evaluation

The Technical Committee (TC) considers that this is a reasonable request since in this case the licensee is proposing to install a thicker liner than that conditioned in the licence. The TC considers that there should be some flexibility in this condition to allow for minor changes in the technical and engineering design of the lining system provided that the proposed changes offer an equivalent level of protection and complies with the requirements of the Landfill Directive.

Recommendation

Change Condition 3.11.1 as indicated below;

*3.11.1 The landfill liner shall **comply with the requirements of the Landfill Directive (1999/31/EC), and unless otherwise agreed with the Agency shall comprise:-***

- a) A composite liner consisting of a 1m layer of compacted soil with a hydraulic conductivity of less than or equal to 1×10^{-9} m/s, (or equivalent to be agreed with the Agency) overlain by high density polyethylene (HDPE) layer **with a minimum thickness of at least 2mm .***
- b) A geotextile protection layer placed over the HDPE layer.*
- c) A 500mm thick drainage layer placed over the geotextile layer with a minimum hydraulic conductivity of 1×10^{-3} m/s, of pre-washed, uncrushed granular, rounded stone (16-23mm grain size) incorporating leachate collection drains.*
- d) The side walls shall be designed and constructed to achieve an equivalent protection.*

Ground 2: Condition 3.12.1 (Leachate Storage Lagoons)

The Council request that provisions for agreeing alternatives to the leachate storage lagoons be included in Condition 3.12.1 in order to provide for any future alternatives that may be submitted for agreement to the Agency.

Technical Committee's Evaluation

The TC agrees that there should be some provisions incorporated into this Condition to allow for agreeing alternatives in the design of storage lagoons and lagoon lining systems. Due to on-going advances in the design of waste management facilities the committee determined that the condition should be made flexible to allow for consideration of new and approved technology where appropriate. Alternative designs may include bituminous geomembrane liners for lining the storage lagoon or concrete tanks for leachate storage, contingent on these systems providing a equivalent level of environmental protection.

Recommendation

Change Condition 3.12.1 as indicated below;

Unless otherwise agreed with the Agency, the Licensee shall provide and maintain a leachate storage lagoon(s) at the facility to facilitate the storage of leachate abstracted/collected from the waste. Prior to the use of any new cells for the deposition of waste the Licensee shall ensure that appropriate leachate management and sufficient leachate storage capacity is provided to cater for leachate generation from those cells.

Unless otherwise agreed by the Agency, the lining for any new leachate storage lagoon shall be a composite liner in accordance with Condition 3.11. **Any alternatives proposed for consideration must have an equivalent level of environmental protection.**

Ground 3: Condition 3.13.1(i) (Landfill Gas Management)

Condition 3.13.1 (i) states that "Prior to 1st October 2003 the Licensee shall install and maintain landfill gas utilisation plant as referred to in correspondence dated 30/10/02". The Council notes that they previously informed the Agency that landfill gas utilisation will comprise electricity generation at the facility. The Condition encompasses circumstances relating to landfill gas utilisation that are outside the control of South Dublin County Council, namely the provision of a power transmission line and national grid connection the ESB. For this reason the Council request that provision for the Agency's agreement to alternative dates be included in Condition 3.13.1(i).

Technical Committee's Evaluation

The TC acknowledges that connection to the grid is outside the direct influence of the Council. The TC suggest that words "unless otherwise agreed" should be added to allow an alternative date to be agreed if the ESB connection is not installed in time. However, this is not a get out clause from the date specified in the licence and this "unless otherwise agreed" should only be considered if the ESB fail to install the connection. In the meantime the licensee will need to work on installing the gas utilisation plant and will have to push the issue of grid connection with the ESB to ensure that is installed as soon as possible

Recommendation

Change Condition 3.13.1(i) as follows;

*Prior to 1st October 2003 the Licensee shall install and maintain landfill gas utilisation plant as referred to in correspondence dated 30/10/02, **unless otherwise agreed with the Agency.***

Ground 4: Condition 10.3(a): Waste Code and Written Records

Condition 10.3(a) requires the licensee to record the quantities of waste disposed and the relevant EWC codes. The council notes that Arthurstown Landfill receives Municipal Waste in baled form only. The Council state that baling facilities that deliver waste to the site are also regulated by separate Waste Licences issued by the Agency. The conditions of these Licences require that only Municipal Waste is baled for transfer to landfill at Arthurstown. Municipal Waste comprises various materials (approximately 55 types as listed in the Agency's publications "Municipal Waste Characterisation" and "Waste Catalogue & Hazardous Waste List" dated 1996). It is proposed to use the following the EWC Code 20-00-00 for Municipal Waste accepted at Arthurstown Landfill.

Technical Committee's Evaluation

This is an issue that the licensee needs to discuss with their licensing inspector and is not an issue for consideration by the TC. In any case the TC does not see any difficulty with the proposal. Note that a revised version of the EPA Waste Catalogue and Hazardous Waste List was published in January 2002.

Recommendation

No Change to Condition 10.3(a).

Signed: _____

Brendan Wall
Technical Committee Chairperson