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Licensing Unit,
Waste Management Licensing,
EPA,
Headquarters,
PO Box 3000,
Johnstown Castle,
County Wexford



21st June 2005

Our Ref: 060504001LT0062GAL File Ref: 350

Re: Ballaghveny Landfill Waste Licence Review (78-2) Application.

Dear Sir/Madam,

RPS-MCOS Consulting Engineers wish to make the attached submission on behalf of North Tipperary County Council in response to the submission made by Shannon Vermicomposting to the Agency on the 14<sup>th</sup> December, 2004 in relation to the Ballaghveny Landfill Waste Licence Review (78-2) Application which was received from the Agency by North Tipperary County Council on the 16th March 2005.

The cover letter submitted with the Shannon Vermicomposting submission alleges that leachate from the landfill is discharged to the Ballaghveny Stream which is incorrect. Leachate from the landfill is discharged to a leachate lagoon in accordance with the EPA Waste Licence for the facility and is transported to the Nenagh Waste Water Treatment Plant for treatment. The Ballaghveny Stream is monitored in accordance with the requirement of the EPA Waste Licence for the facility and monitoring results show that water quality in the stream is satisfactory and is not adversely impacted upon by the landfill. The Nenagh WWTP discharges to the Nenagh River and ongoing monitoring of the plant discharge is carried out. The discharge from the WWTP is in accordance with water quality requirement of the Urban Waste Water Directive.

The Shannon Vermicomposting submission includes a number of photographs taken from within the landfill site. It is essential in the interest of health and safety that public access to the working landfill is permitted only in accordance with appropriate site regulations, supervision and control. Shannon Vermicomposting accessed the landfill without the appropriate notification or consent of the Landfill Manager. The company's disregard for all appropriate procedures and health and safety requirements is illustrated in photograph No. 6 in their submission which shows Mr. Tomas Smith, an associate of Mr. Oggs, in a dangerous position within the landfill leachate lagoon without the benefit of any protective clothing or safety harness. The photographs are selective and unrepresentative of Ballaghveny Landfill and the Council rejects the various inaccurate references drawn by Shannon Vermicomposting from these photographs.

We trust this is satisfactory, but please do not hesitate to contact the undersigned if you have any queries.

J. Grant (Managing), G. Carty, J. Hegan (UK), F. Ferguson, G. Murphy, K. O' Sullivan, K. Power, P.J. Rudden, J. Shalloe, G. Young (UK).

Dublin | Belfast | Cork | Limerick | Galway | Waterford | Carlow | Letterkenny



# RPS Group Ltd



Yours sincerely,

Siobhan Aherne

Senior Project Scientist For RPS-MCOS Ltd.

sa/wm

Encl.

For still

### 1. Applicable Law

North Tipperary County Council submitted the Waste Licence Review Application (78-2) to the EPA on 16<sup>th</sup> March 2004 in accordance with Waste Management (Licensing) Regulations, 2000. On 6<sup>th</sup> July 2004 the EPA responded to the application with an notice in accordance with Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations, 2000. The applicant had one month from the date of notice to reply to the EPA as stated. Accordingly the reply was sent by North Tipperary County Council to the EPA on 6<sup>th</sup> August 2004.

On 12<sup>th</sup> July 2004 the Waste Management (Licensing) Regulations 2004 came into force and the remaining provisions of the Protection of the Environment Act, 2003 were commenced however they are not applicable to this application as it was submitted in March 2004 prior to this legislation coming into force.

#### 2. Landfill Directive

The definition of "new landfill facility" in accordance with Waste Management (Licensing) (Amendment) Regulations, 2002 means a landfill facility which –

#### (a) came or comes into operation, and

(b) is subject to a waste licence or an integrated pollution control licence that was or is granted on or after 16<sup>th</sup> July 2001.

Ballaghveny Landfill was granted a Waste Licence on May 2001 therefore Ballaghveny Landfill is not defined as a new landfill and the deadline for certain prohibitions and restrictions on types of waste is 16<sup>th</sup> July 2009 in accordance with Article 53 (1)(c) of Waste Management (Licensing) (Amendment) Regulations, 2002.

These deadlines for waste prohibitions refer to waste accepted for disposal and since it is proposed to accept C&D waste for receivery at the landfill we conclude that it should not be restricted in any case.

More specific prohibition deadlines for untreated sludges are referred to in the existing waste licence and the proposal surrounding this waste will be discussed in section 5 on treated sludges below.

#### 3. First Proposal – Increased Height

The increase in height applies to cells 3-5. Cells 1 and 2 are lower in height than 114m OD.

#### 3.1 Agency Function

In mid 1998 North Tipperary County Council applied for a waste licence for Ballaghveny Landfill under the Waste Management (Licensing) Regulations. This application included for a final height of 114mOD for the landfill which was based on annual waste intake at the facility at that time and assuming a waste licence would be issued within a reasonably short period which would then allow future extension options to be designed and constructed.

In early 2000 there was no decision on the application for a waste licence and North Tipperary County Council realised that their remaining void space at the existing cells 3-5 was nearly exhausted. They appointed RPS-MCOS to design and to prepare the necessary contract documents for the construction of additional cells 6-8. During this period the maximum height of

114mOD in cells 3-5 had been exceeded due to lack of alternative disposal options either at the landfill or within the county. Although cells 1 and 2 were lower in height than 114m OD at this time it was considered that cells 3-5 were better suited to accepting waste given that they were engineered cells with a leachate collection system and gas venting.

During 2000 a revised landscape plan was submitted to the EPA proposing a final post-settlement height of 120mOD. The EPA stated, however, that they could not consider this submission at that stage of the licence process but that North Tipperary County Council would have an opportunity to resubmit this appeal following the issue of the Proposed Decision (PD).

The PD was issued on 11<sup>th</sup> December 2000 and on 5<sup>th</sup> January 2001 North Tipperary County Council sought the increase in the post settlement height from 114m OD to 120m OD. However, the relevant Condition 8.2 of the Waste Licence remained unaltered when the Waste Licence was finally issued on 4<sup>th</sup> May 2001.

In September 2001 waste disposal activities commenced in the newly constructed cell 6 following EPA approval. At this point due to continued filling during the period 1998-2001 the waste level within cells 3-5 was approximately 119mOD.

## 3.2 Assessment of Proposal

As part of the partial review process the EPA requests specific information to be submitted and this was sent to the applicant on 22<sup>nd</sup> December 2003. It was requested by the EPA in this correspondence to assess the visual and hydrological impact of the height increase.

The licensee did not comply with condition 8.2 which refers to the height increase however section 3.1 above outlines the background to this non-compliance.

The impact of the increase in height was assessed and considered to be minimal (Visual Impact Assessment by Mitchell & Associates Landscape Architects). Disturbing the waste would likely cause more of an environmental impact therefore the licensee believes it would be undesirable to relocate the waste. In the Waste Licensee Review Application the following reasons not to remove the waste were outlined:

- It is considered that any works involving the removal of 'old' waste will cause severe odour nuisance to the local population
- Disposing of excavated waste in the current cells will significantly reduce the remaining void space at the landfill and could potentially create a waste disposal crisis in North Tipperary.
- The disposal of excavated waste in the current cell will have severe financial implications on the local authority operating a landfill with a licensed waste intake of 37,000 tonnes.

Failure to comply with the height requirements of the existing licence is not due to the capping methods available it is due to reasons outlined in section 3.1 above. The proposed capping system is in accordance with the EPA guidelines and conditions of the waste licence.

The highest point surveyed in cell 3-5 (DG 0122-01 dated January 2004) is 117.5m OD with the majority of the top surface of cells 3-5 between 114m and 116m OD which is presented in the photomontages. The photomontages were prepared to assist in the professional assessment of the visual impact of the capped landfill. The raising of cells 3-5 in the capping works to 120mOD will only occur at its central highest point and is necessary to accommodate both the capping system (>1m) and additional waste material following necessary regrading works on the side slopes. Depending on settlement rates in the interim, it may not be necessary to raise the capping to 120mOD at its highest point.

The statement that the increase in height represents 40,000m3 volume of waste is incorrect – computer modelling calculates the volume of waste in cells 3-5 over 114mOD following regrading works to be 21,500m3 approx. with a further 10,800 m3 of soils needed for the capping system.

## 4. Second Proposal – C&D Waste

Article 14 from the EPA requested that the C&D waste recovery proposals be assessed on the basis of the possible impacts of dust, noise and surface water runoff. Visual impact was not deemed to be so significant that it required an assessment. The selected location for the C&D proposal is considered to be well screened and will not cause any visual impact.

Initially the local authority will use the crushed aggregate as raw material on development and infrastructural works and the surplus soil for daily cover material, landfill remediation and restoration purposes. Other uses for the material will be developed which were outlined in the waste licence review application.

## 5. Third Proposal – Treated Sludges

NTCC applied to the EPA to amend Condition 5.12.3 to extend the date from 1 January 2004 to 1 January 2005 for acceptance of untreated sludges to allow for the proposed improvement works at Thurles Sewerage Scheme. The justification for this proposed for an extension of the deadline is there is no treatment option available for the sludges so untreated sludge would still have to be accepted until such time as the improvements have been made at the WWTP.

#### 6.1 Financial Provisions

The financial information provided met the EPA requirements.

## 6.2 Leachate Management

Recent leachate levels have reduced and this is due to the commencement of pumping the leachate from the leachate abstraction wells. This leachate is then sent to the Nenagh WWTP for treatment. The leachate is not being returned to the landfill cells. The provision of an engineered capping system will significantly reduce the amount of leachte generated within the landfill cells 3-5.

## 6.3 Fitness of the Applicant

Ballaghveny Landfill and it's operator, NTCC, are regulated by the EPA.