



ENVIRONMENTAL HEALTH OFFICERS SERVICE, GALWAY,
Health Service Executive,
West City Centre,
Seamus Quirke Road,
Galway.

Sub. ①

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

☎ (091) 523 122
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Our Ref:

Your Ref:

The Environmental Health Service
 /mm
 20 MAR 2009
 0915

Environmental Protection
 Agency
 25 MAR 2009

23rd March, 2009.

Environmental Protection Agency
H.Q. PO Box 3000
Johnstown Castle Estate
County Wexford

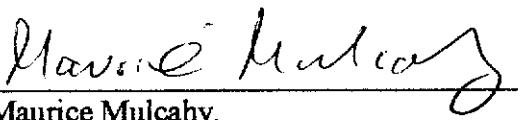
**Re : WO259-01 ~ Waste Licence Application, Limerick Race Company PLC,
Greenpark, Limerick**

Dear Sirs

Please find attached response for the Environmental Health Service.

Yours faithfully,

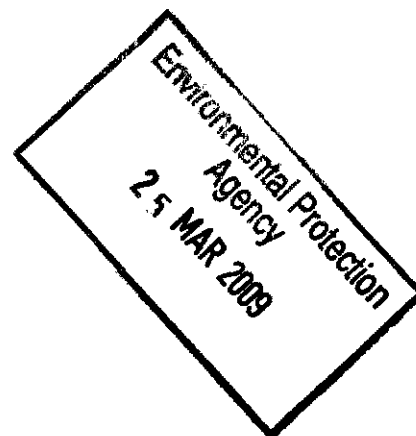
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Maurice Mulcahy,
Area Chief Environmental Health Officer

Enc

04.03.09

Ms. Annette Fitzgerald PEHO
HSE West
2nd Floor,
Ashbourne Hall,
Dock Road,
Limerick.



**re: Waste Licence Application W0259 - 01 Limerick Race Company PLC,
Greenpark, Limerick**

Dear Ms. Fitzgerald,

Having examined the above application and the accompanying Environmental Impact Statement the following observations and comments can be made from a public health perspective:

Scope:

The application relates to the in-filling of material on lands within the curtilage of a large site at the former Limerick Race Course at Greenpark, Ballinacurra, Limerick in preparation for a large-scale property development. The Applicants originally intended to have three different aspects to the development – amenity, residential and retail. However, the retail aspect of the original planning application has been withdrawn and the Applicants are now intending to pursue the remainder of the development. In order to facilitate the construction of the proposed circa 900 residential units and amenity area to include football pitches, green areas, changing rooms and tennis courts, the Applicants propose to raise the existing land levels by means of infilling with subsoil and inert construction and demolition materials.

Having consulted with Limerick City Council regarding this application, it has been established that the Applicants have previously been granted a Waste Permit and have already begun in-filling work on the site. However, as this volume of material is categorized under Class 4 & Class 13 of the Fourth Schedule of the Waste Management Acts 1996-2008, a waste licence is now required.

It should be noted that the EIS which has been submitted in support of the licence application was compiled primarily for the purposes of securing planning permission. Therefore much of the information contained therein relates to the operational phase of the original planning application and is not particularly relevant to this report.

It should also be noted that it is stated in the EIS that in-filling will be carried out "under the auspices of a Construction Management Plan to be prepared by the contractor in consultation with the local authority". No details of this plan have been submitted.

The primary concerns from an Environmental Health perspective are as follows:

1. Proximity to communities & effects of construction traffic, vibration and dust and their impact on air quality and noise levels in surrounding areas

The proposed development is located within the confines of the former Limerick race course at Greenpark. This is a large site bordered to the north and east by the high-density residential areas of Courtbrack and South Circular road, to the west by the N69 Dock Road and a halting site, to the south by farmland by low-density housing and the Ballinacurra Creek which flows northward toward the River Shannon. The Waste Licence application states that 343,200 tonnes of Class 4 Waste (construction materials). According to the EIS, *"the likely duration for the filling of the residential area may be in the region of 6 months subject to weather conditions and overall site development considerations"*.

The EIS also states that while *"peak daily construction deliveries to the site are expected to be of the order of up to 50 delivery vehicles additional construction traffic to the site will be associated with other permitted development and the proposed increase in the levels of the site to be achieved through filling of the site. This will involve a significant volume of fill which will be placed on the site in a phased basis with the residential and leisure areas receiving the initial phases of filling"*. However, no noise prediction modelling has been submitted for the in-filling stage to which this application relates.

The EIS states *"Due to the nature of the activities undertaken on a large construction site, there is potential for generation of significant levels of noise. The flow of vehicular traffic to and from a construction site is also a potential source of relatively high noise levels.....due to the fact that the construction programme has been established in outline form only, it is not possible to calculate the actual magnitude of noise emissions to the local environment."*

From a public health perspective, noise and air pollution will potentially have the greatest impact on the adjacent populations. While an Environmental Noise Study has been carried out identifying the nearest sensitive receptors and current noise levels, there is insufficient information contained in the EIS with regard to predicted noise levels from the proposed in-filling operation. This is critical in assessing whether the activities will have an impact on the health of the local communities.

Recommendation:

This department recommends that the Applicants be requested to submit further information in the form of a noise study carried out in accordance with the EPA "Environmental Noise Survey – Guidance Document" and which identifies:

- **Specific noise sensitive receptors identifiable on a map.**
- **The predicted noise impact on these receptors.**
- **A baseline study indicating current environmental noise levels at these points which shall begin before operation.**
- **The volume of traffic associated with delivery of waste material to the site.**

Note: Notwithstanding the lack of information, the Applicants do propose to implement the following control measures to mitigate against the possibility of noise nuisance:

- **limiting the hours of operation during which site activities likely to create high levels of noise or vibration are permitted;**
- **establishing channels of communication between the contractor/developer, Local Authority and residents;**
- **appointing a site representative responsible for matters relating to noise and vibration;**
- **monitoring typical levels of noise and vibration during critical periods and at sensitive locations;**

Furthermore, it is envisaged that a variety of practicable noise control measures will be employed. These may include:

- *selection of plant with low inherent potential for generation of noise and/ or vibration;*
- *erection of barriers as necessary around items such as generators or high duty compressors;*
- *situate noisy / vibratory plant as far away from sensitive properties as permitted by site constraints and the use of vibration isolated support structures where necessary;*
- *all site access roads will be kept even so as to mitigate the potential for vibration from lorries."*

The main potential source of air pollution from the site will be from fugitive dust, both from incoming trucks and from on-site deposited materials.

Recommended mitigation measures:

- i) On-site water sprinklers & bowsers should be employed during dry weather to suppress dust particles.**
- ii) All trucks delivering to the site shall be covered with tarpaulin to reduce the dust emissions on nearby roads and at entrance to the site**
- iii) A wheel-wash shall be installed at the exit to reduce the amount of materials dragged onto the N69 Dock Road.**

2. Potential for contamination of ground water & surface water

The site is 48hectares in area and is classified as having an under-lying Locally Moderate (Lm) aquifer and High to Low groundwater vulnerability.

The EIS indicates that the highest existing groundwater level was recorded on-site at 0.6m below ground level. As no excavation into the existing ground surface will take place, the level of groundwater is not expected to be affected. The main concerns with the infilling of materials would be from the percolation of leachate through the existing ground to contaminate the underlying aquifer. The material to be used for infilling will be inert construction & demolition waste and soils and this should not pose a risk to groundwater once in-situ.

Recommended mitigation measures:

The Applicants propose to control the materials through the following steps:

- i) Inspection of materials upon arrival and all unsuitable materials to be turned away** (Note: This should include documentation of the origin & nature of the waste and a quarantine area for suspect loads).
- ii) Only licensed carriers to be allowed to deposit on-site.**
- iii) Continued monitoring of groundwater should be carried out and results of same submitted to Limerick County Council for recording.**

Surface water can be affected in a number of ways during the process of infilling on this scale i.e. through items of waste falling into nearby streams, inadvertent filling of land drains and watercourses, run-off from the surface of the in-filled land which may contain high levels of suspended solids being allowed to enter existing watercourses.

Recommended mitigation measures:

In order to safeguard against pollution/contamination of the existing natural watercourses in the area:

- i) All existing watercourses and land drains shall be mapped and protected from in-filling**
- ii) Surface water from the in-filled areas shall be diverted to settlement ponds in which suspended solids may be settled out before being allowed to overflow to a watercourse which has the assimilative capacity to accept it.**
- iii) The settlement ponds shall be de-sludged on a regular basis as necessary.**
- iv) Continued monitoring of surface water systems should be carried out and results of same submitted to Limerick County Council for recording.**

3. Pest Control

The existing site has been vacant and un-disturbed for a number of years. Any disturbance will cause an upsurge in rodent activity both within the site and emanating from the site. The existing population of rats, mice and other species such as birds will inevitably migrate to nearby areas. As much of the surrounding land is occupied by residential and commercial accommodation, this has the potential to cause pest control problems for home and business owners nearby. The EIS highlights various areas in the existing site such as the grassland habitat and woodland habitat as being areas which it is most likely that species such as the house mouse and brown rat would inhabit. While the suggested mitigation measures in the EIS are aimed at minimising the impact on the existing flora &

fauna, no details are given of any proposed measures which would minimise the likelihood of the migration of rats and/or mice to the surrounding areas.

Recommended mitigation measures:

- i)** In order to minimize the impact of the proposed works on the surrounding areas with regard to pest control problems, a pest control plan for the entire site shall be implemented to include the following:
 - **A comprehensive site plan showing baiting points around the perimeter of the site**
 - **A signed service contract with a competent pest control contractor**
 - **Records of all site visits with details of activity recorded therein**
 - **A nominated on-site contact with whom this department may liaise should issues arise.**
- ii)** The limitation of sources of attraction for rodents can also be effected by securing the site boundary in such a manner as to eliminate fly-tipping and illegal disposal of waste by third parties.

Should the above concerns be addressed by the Applicant, there is no objection from a public health perspective to the granting of this licence to the Applicants.

Yours sincerely,

Tom Boland
Environmental Health Officer

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Construction Phase

A variety of items of plant will be in use, such as excavators, lifting equipment, dumper trucks, compressors and generators. There will be vehicular movements to and from the site that will make use of existing roads. Due to the nature of the activities undertaken on a large construction site, there is potential for generation of significant levels of noise. The flow of vehicular traffic to and from a construction site is also a potential source of relatively high noise levels.

The potential for vibration at neighbouring sensitive locations during construction is typically limited to excavation works and lorry movements on uneven road surfaces. Due to the proximity of sensitive locations to potential site access points, the more significant of these is likely to be uneven road surfaces. However, there is little likelihood of structural or even cosmetic damage to existing neighbouring dwellings. Due to the fact that the construction programme has been established in outline form only, it is not possible to calculate the actual magnitude of noise emissions to the local environment. However, the impact due to construction activities will be transient in nature.

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