



Dr. Ian Marnane, Licensing Unit, Office of Licensing and Guidance, Environmental Protection Agency. Johnstown Castle Estate, County Wexford.

24-5-07

# Re: Waste Licence Application W 0231-01 Fingal Landfill

Dear Dr. Marnane,

The Applicant's recent response (18-5-07) to the Agency's request for additional information has confirmed (response to Point VI) that a significant groundwater resource exists in the Nevitt / Tooman area of Fingal.

The Applicant's and my earlier submissions have demonstrated that a supply in the order of 4,000m<sup>3</sup>/day is readily available at Nevitt / Tooman. However, many times this amount could be developed to the south, east and west of the proposed landfill footprint as is noted in the Applicant's response to the Agency's Point VI.

The only limiting factor to the amount of groundwater developed in the general Nevitt / Tooman area will be the location of the proposed landfill footprint.

### Sustainable Development & Strategic Planning

I wish to bring to your attention a paper which I understand was presented at the;

## 34th ANNIVERSARY CONGRESS

of the International Association of Hydrogeologists Beijing, China 9 - 13 October 2006.

The paper in question was entitled;

'HYDROGEOLOGICAL MONITORING ACROSS A GROUNDWATER DIVIDE, NORTH DUBLIN, IRELAND'

by; F. COLLINS, S. HERLIHY

RPS Group, Ground Floor, Block 2, West Pier Business Campus, Dun Laoghaire, Co Dublin, Ireland.

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The paper describes the extent of the hydrogeological investigations carried out at the Tooman – Nevitt site in relation to the development of a landfill at this location.

The paper concludes with the following statement;

'At present it is uncertain whether there is potential to develop this locally important aquifer further. Irrespective of this, a land use decision will be made based on sustainable development principles which considers the regions water use and waste management needs'

I respectively suggest that the above clearly indicates that the Applicant's consultants had yet to determine the potential of the limestone aquifer at the landfill site in October 2006. Also that the Applicant's consultant's view of what constitutes *sustainable development*, as described in the papers closing remarks, falls far short of the usually accepted principle.

Sustainable development is usually defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

It would appear from the recent response to Point VI that the Applicant has now determined the significant potential of the limestone aquifer in the Nevitt / Tooman area.

The Strategic Plan for water supply outlined in the Applicant's response to Point VI acknowledges the existence of the groundwater resources in this part of Fingal but dismisses its use-value as the future water supply for the area will be based wholly on surface water.

Relying 100% on surface water from the Liftey at Leixlip in the medium term would seem to ignore any possibility (however remote) of a failure of this supply through the accidental or deliberate pollution of this surface source. Such reliance in the case of an incident might be later judged to be misplaced especially when a locally significant groundwater abstraction can be readily commissioned in close proximity to an existing reservoir.

## Source Protection

Indeed, as the Applicant states, the Resource Protection Zone approach has been used in the location of recent landfills and is an excellent regional land use planning tool.

The guidance matrix that underpins the Resource Protection Zone approach should not be used in isolation and must now also include for the principle of sustainability which largely post dates the publication of the landfill site selection matrix.

Any siting study using the Landfill Matrix might usefully have also considered at the outset the prospect of locating the largest landfill in the country;

- 1. on the only recognized and proven aquifer in the Fingal area
- 2. in close proximity to the largest groundwater abstraction in the east of the island

Finally, the original site selection study might have been usefully revisited when the detailed site investigations at the preferred site established that the exact same hydrogeological conditions that underpin the nearby groundwater abstraction are also found beneath the footprint of the proposed landfill.

### Summary

The Applicant's response to the Agency's Point VI has acknowledged that the development of the landfill at the Nevitt / Tooman site will compromise the future development of the significant groundwater resource now outlined by the Applicant to be present in this area.

I respectively suggest that such an outcome renders the proposed landfill development contrary to the usually accepted definition of sustainability and which is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

This likely significant impact on the groundwater resources of the North Fingal area was not mentioned or described in the EIS prepared for the landfill project.

It remains for the regulators to determine whether locating a landfill here is consistent with EU and national sustainable development guidelines and objectives and also whether the EIS adequately described the likely significant impact of the development on groundwater resources.

Yours Sincerely,

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EurGeol Kevin T. Cullen PGeo