UB. NO. 59 12th December 2011 greenstar Environmental setting the standard Attn Mr Brian Meaney Protection Agency Inspector Greenstar Lutited. 21 DEC 200 Unit 6. Ballycgan Busidess Pick **EPA Headquarters** Bat yogen Road, Sandyfrid PO Box 3000 Debuc 18. TO - 25 (1054-2500 Johnstown Castle Estate Fav: + 355-1-194-7890 Co Wexford Email Plu serendaria

Re: Murphy Environmental Hollywood Ltd., Hollywood Great, Nags Head, The Naul, Co. Dublin WO129-3

Dear Mr Meaney

Greenstar has been in ongoing contact with the Agency regarding the enforcement of Section 53A of the Waste Management Act (as amended), which obliges operators to apply disposal gate fees which at a minimum include the cost of setup, operation and post-closure aftercare of the landfill. The company has concerns about the lack of consistent compliance by many landfill operators with this important legislation, leading to unsustainably low landfill gate fees in many cases and an absence of Agency agreed post-closure financial provision by almost all landfill operators.

In this context, we wish to alert the Agency to the proposal by MEHL to landfill 500,000 tonnes per annum of inert, non-hazardous and hazardous waste at Hollywood Great, The Naul, Co. Dublin.

As you are aware Section 53A Part S of the Waste Management Act as amended states the following:

"The Agency shall not grant a licence or revised licence in respect of the disposal of waste at a facility referred to in subsection (1) unless it is satisfied that the proposed licensee or licensees will take or will continue to take steps to comply with this section."

Furthermore you will be aware of the obligations under Part III of SI 395/204 for the applicant to provide particulars of:

"(i) such financial provision as is proposed to be made by the applicant, having regard to the provisions of Articles (7)(i) and (8)(a)(iv) of the Landfill Directive and section 53(1) of the Act, and (ii) such charges as are proposed or made, having regard to the requirements of section 53A of the Act"

In a February 2011 submission to An Bord Pleanala, Fingal County Council highlighted its concerns regarding the financial provision for this proposed development:

"The applicant has provided little information in relation to financial assurances. Given the nature of the proposed development and the long-term implications of such a development, this is a serious concern."

Harrison, G. Barani, K. Hell, J. Latropa, D. Rashinov, E. Barger, S. Holav, Registrical Office, Burgan Court, B. Herr Hyl Philar Sendpring, Distance 18.

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Other submissions to the Agency have questioned the financial stability of the applicant company. It is not apparent to Greenstar whether the Agency has sought scientific evidence to date financial accounts of the company, nor whether the Agency has sought scientific evidence to determine if the quarry at the applicant site, which is within the catchment of housing development sites alleging iron pyrite damage, is a possible source of pyrite contaminated construction material – an issue that could in theory affect both the financial wellbeing of a quarrying company and the risk profile of a landfill, be it hazardous or non-hazardous.

It is not clear from the application documentation available on your website how the applicant has submitted the necessary information for both it and the Agency to comply with the obligations set out in the above legislation. We are of the view that it will not be enough for the Agency to consider information on the currently approved financial provision only – given the complexities and unique risks associated with this proposal it is only reasonable and prudent that significant financial detail will have to be provided in relation to the likely operation and aftercare cost of the non-hazardous and hazardous wastes proposed to be accepted in the future and how those costs will be reflected in gate fees.

We understand that the Agency will need to consider this matter in advance of issuing a Proposed Decision (PD), particularly if the intention of the PD was to grant a Waste Licence. The Waste Management Act is clear in its intention that prior to taking a decision to grant a Waste Licence (a decision includes a Proposed Decision) the Agency must be satisfied that the Applicant will take or continue to take steps to comply with Section 53A.

From the information available to third parties, it is not apparent that the Applicant has made available to the Agency particulars of the Financial Provision to be provided or how this provision is to be reflected in gate fees.

You will be aware that Fingal County Council, in its submission to the EPA dated 16th September 2011, has outlined its concerns about the long-term suitability of the proposed design which according to the technical assessment of the local authority (prepared by consulting engineers RPS) will facilitate movement of gas and leachate from hazardous areas of the site to non-hazardous and inert cells. The report envisages an aftercare period of 100+ years for the hazardous waste implying that an equivalent duration will also have to be considered for those non-hazardous and inert portions of the site where hazardous emissions are at risk of migrating.

The duration, tonnage and hence cost of disposal and aftercare of the three different landfill classes proposed are unclear. Fingal County Council questions the proposed lifespan of the site, pointing out that the landfill capacity is some 3.8M m3 which at a waste acceptance rate of 500,000tpa implies a lifespan of no more than 8 years. You will be aware that in 2010 the applicant accepted just 30,000 tonnes of waste at this facility, calling into question its projections for the long-term acceptance of inert waste at the site. The applicant claims to have capacity for 25 years of hazardous waste disposal, but given the fact that non-hazardous waste could potentially be landfilled compliantly in hazardous waste cells strict regulation of waste inputs will be necessary if financial provision and gate fee calculations (which are closely connected to landfill lifespan) are to remain accurate and enforceable. Before waste fees can be established to the satisfaction of the Agency and extant legislation greater clarity will have to be provided on the tonnages, types and nature of wastes proposed to be accepted at this facility.

The local authority also questions the effect of the proposed cocktail of hazardous waste on the DAC liner, believing there to be an increased risk of long term leachate leakage through the liner. The report points to the hydrogeological link between the site of this proposed landfill and the important water source at the Bog of The Ring.

In its submission to An Bord Pleanala, Fingal County Council expressed strong concerns about the lack of natural ground water protection at the site.

"In accordance with the Hydrogeological & Engineering Review, prepared by RPS on behalf of Fingal. County Council, there are serious concerns regarding the lack of natural protection at the subject site. The proposed site offers no natural geological or hydrogeological protection for the development of a hazardous waste landfill. This is a critical issue."

Given recent experiences of pyrite damage nationally and the most recent High Court Judgement in this regard (James Elliot Construction Ltd -v- Irish Asphalt Ltd, May 2011) it would seem wise for any quarry proposing to host a hazardous waste landfill site to consider within their ELRA, CRAMP and Financial Provision Assessments the risk of the existence of pyritic materials on the site. Both the EPA Landfill Site Selection Manual and the GSI Landfill Matrix pre-date the pyrite problem in Ireland, however international textbooks on landfill construction advise against the construction of landfills on pyritic soils because of the risk posed by expansive soils to liners and leachate collection systems (see Design of Landfills and Integrated Solid Waste Management, Bagchi, 3rd Edition, 2004).

As you know the consideration and assessment of such risks is essential to the determination of Financial Provision. The proposal by the applicant to defer such an assessment and the consequential calculation of Financial Provision, as you are aware, does not fit in with the obligation of the Agency to be satisfied as to the *particulars* of Financial Provision and gate fees in advance of making a decision.

We respectfully submit that the above are fundamental and significant issues (not an exhaustive list) that need to be considered in assessing the duration and cost of post-closure management at this site. These issues must be given full and proper consideration at this stage of the process if the Agency is to comply with Section 53A Part 8 in assessing this application. The non-discrete design which according to the local authority would seem to facilitate movement of emissions between the various classes of landfill proposed, will require complex analysis if the true aftercare cost of this landfill is to be accurately and legally reflected in operating gate fees for hazardous, non-hazardous and inert waste accepted at this facility.

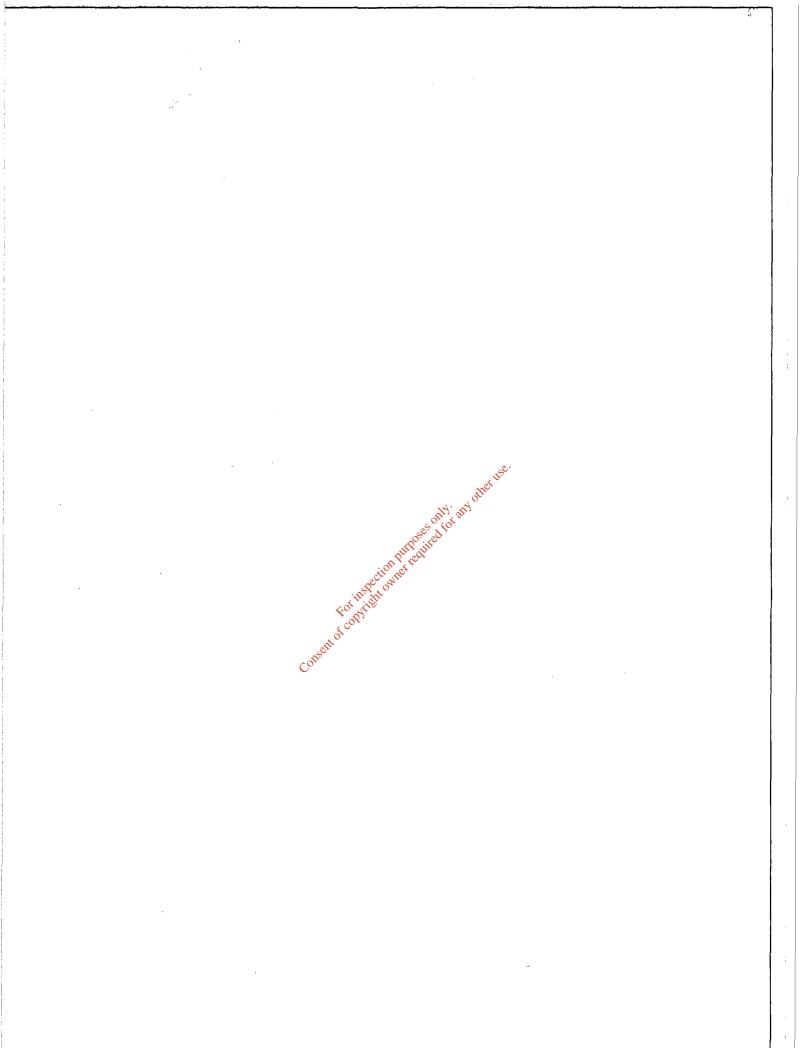
If you have any queries about the issues raised in this letter, please do not hesitate to contact the undersigned.

Yours sincerely

Margaret Heavey

Head of Landfill Development

Geoff Bailey Divisional Managing Director



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