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APPENDIX 1A

LETTER FROM GEOLOGICAL SURVEY OF IRELAND

Report No. JBA2901-10/EIS/dl/tp

Suirbhéireacht Gheolaíochta Éireann Tor an Bhacaigh Bóthar Hadington Díle Átha Cliath 4



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8 NOV 2003

17 November 2003

Mr Tim Paul, Managing Director, John Barnett & Associates, CSA House, 7 Dundrum Business Park, Windy Arbour, Dublin 14

Dear Tim,

Unauthorised Waste Disposal on Roadstone Lands at Blessington

Thank you for your letter dated 11 November 2003 and the attached reports, which I have read with interest. Thank you also for the visit by your team from your company and from Parkman International to GSI on Thursday Tovember 6^{th} 2003, at which you outlined the work carried out to date, and at which we discussed the aquifer classification and groundwater vulnerability rating at the site.

In response to your specific questions:

- 1. I can confirm that the aquifer classification for the sand and gravel aquifer underlying the Roadstone site is as stated in the County Wicklow Groundwater Protection Scheme reports, namely a 'Locally Important Sand & Gravel Aquifer', coded 'Lg'.
- 2. On the understanding that the proposed engineered landfill cell south of 'Area 1' will be underlain by an unsaturated zone of 8 metres, I can confirm that the groundwater vulnerability rating will be '*High*'.
- 3. An aquifer classification of 'Lg' and groundwater vulnerability rating of 'High', gives a groundwater protection zone of 'Lg/H'.
- 4. Within the Groundwater Protection Response matrix for landfills, this zone gives a response of 'R3¹', which is explained as:

"Not generally acceptable, unless it can be shown that:

- The groundwater in the aquifer is confined; or
- There will be no significant impact on the groundwater; and
- It is not practicable to find a site in a lower risk area."
- 5. The first proviso (confined aquifer) does not apply in this case. Hence your risk assessment will need to demonstrate that no significant adverse impact on the groundwater will arise and that a lower-risk alternative site is not practicable.
- 6. I should also note that the "Groundwater Protection Responses for Landfills" document is primarily intended for use at the initial screening stage of a range of potential landfill sites, rather than for evaluating a site such as yours, where unauthorised disposal has already taken place.

I hope I have been able to answer your questions satisfactorily. If you have any further queries, please let me know.

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Yours sincerely,

Geoff Wright, (/ Senior Hydrogeologist



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Department of Communications, Marine and Natural Resources

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