Environmental Protection Agency An Unformative Action Agency

> Headquarters, PO Box 3000 Johnstown Castle Estate County Wexford, Ireland

Ceanncheathrú, Bosca Poist 3000 Eastát Chaisleán Bhaile Sheáin Contae Loch Garman, Éire

 T:
 +353 53 9160600

 F:
 +353 53 9160699

 E:
 info@epa.ie

 W:
 www.epa.ie

 LoCall:
 1890 33 55 99

The Naul County Dublin

Murphy Environmental Hollywood Limited

3 May 2012

Ms Patricia Rooney

Hollywood Great

Nags Head

W0129-03

re: <u>Clarification to notice in accordance with Article 16(1) of the Waste Management</u> (Licensing) Regulations dated 23 March 2012

Dear Ms Rooney

I am to refer to the above referenced application for a waste licence relating to a facility at Hollywood Great, Nags Head, The Naul, County Dublin. With reference to our notice under Article 16(1) of the Regulations and your request for clarification, I am to offer the following clarification as requested in your letter dated 19 April 2012.

The proposed scope is not ideal and it is recommended that it be adjusted as set out below. The attached diagram illustrates the recommendations.

The four "well pairs" to be located in the four apparent fault blocks should not be so far apart. It may be preferable to have data points within 100-200m of each other. Therefore we suggest the following:

- 1. BH23 should not be next to BH16, but BH20. BH16 was drilled to 60m and did not report Loughshinny (it was cored so there's good data) and therefore another 60m well in this location will not "bottom out" the Loughshinny. It is considered that it may be better to have this second well closer to the fault system and therefore beside the existing well BH20. BH20 was not cored but is reported to be screened at the base of the Namurian. Therefore a second, deeper well targeting the Loughshinny should work at the BH20 location.
- 2. BH22 should not be in the northeast corner (too remote and Loughshinny apparently too deep). It may be appropriate for a new well pair to be installed close to the shallow borehole locations BH22/22A (in unconsolidated materials). It may be appropriate to install these two new wells to ~40m and ~60m depth and screened appropriately to be able to target the Namurian and Loughshinny, respectively.
- 3. BH24 next to BH18. BH18 appears to be screened in the Loughshinny at about 16-21m depth. It may be appropriate to install BH24 to 15m deep and screened between 5-15m (or thereabouts).

4. BH25 should not be in the southeast corner (too remote). A new well pair close to the shallow borehole location BH23 (in unconsolidated materials no water strikes to 23m depth) may be preferable with two new wells installed to ~40m and ~60m depth and screened appropriately to be able to target the Namurian and Loughshinny, respectively.

Additional wells already identified:

- 1. The well in the non-hazardous cell (BH26) might better serve as a monitoring well, not the pump test well.
- 2. Proposed well to the north (BH21) targeting the fault zone. It may be preferable for this well to be closer to the suggested end of this north-south fault (on your plan) and not at the north boundary of the site. It is designed to intercept the fault zone in this area. With this as the target our sense is having two wells one to 40m depth (screened 20-40m) and a second to 60m (screened 40-60m) may be better than the 90m option, recognising we may not reach the Loughshinny.
- 3. The pump test well may not usefully be BH26 (believed to be too remote from the main fault block intersection and area). The original pump test well (BH17) location was good, it was just the well was screened across the Namurian and Loughshinny so not that useful in this sense. Therefore it may be that a new pump test well about 25m east of existing BH17 (not too close to it) towards the main north-south fault, but not too close to it, is appropriate.

Not all boreholes need to be cored. However at the proposed locations near existing boreholes BH20, BH22/22A and BH23, coring the deep borehole would help a lot to understand the geology and aquifer units and fracture distribution and therefore could be invaluable. The pump test well might also of course benefit from being cored. If four is seen as prohibitively expensive then it may be appropriate that the pump test plus one of the two boreholes to the east of the main fault are prioritised for coring (so 2 not 4 cored).

The scope of the proposed pump test should be detailed and may be relayed to the EPA in advance of this later work being undertaken.

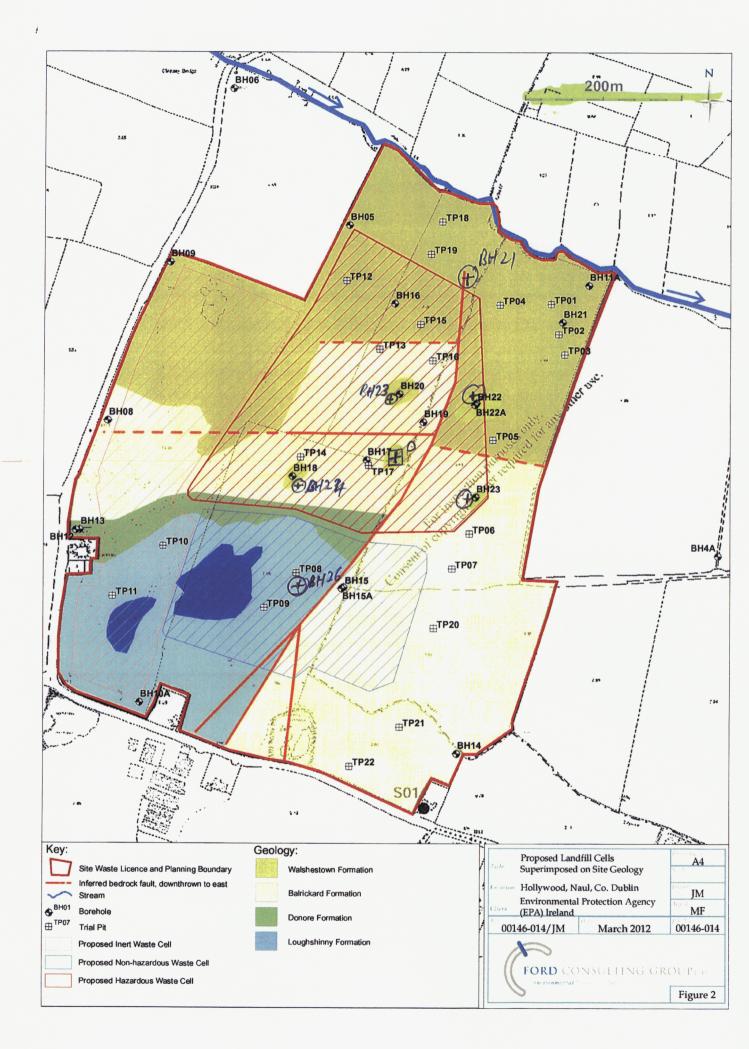
It is noted that the MEHL numbering system for the proposed new wells should be changed as there are already boreholes with the same reference (e.g., BH22 and BH23) which will be confusing later.

Please note that the application's register number is W0129-03. Please direct all correspondence in relation to this matter to Administration, Environmental Licensing Programme, Office of Climate, Licensing & Resource Use, Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, County Wexford quoting the register number.

Yours sincerely,

Brian Meaney Inspector Office of Climate, Licensing & Resource Use

W0129-03



nonene ante don

A constitue

