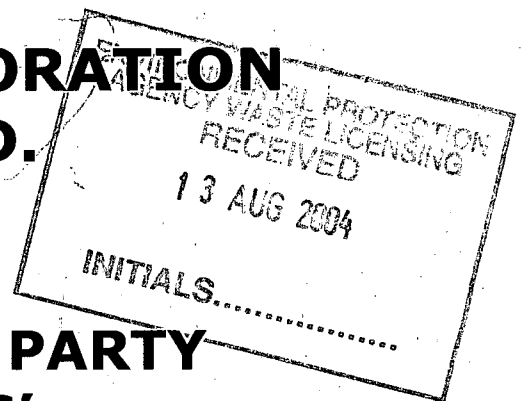


**BROWNFIELD RESTORATION
IRELAND LTD.**



**'COMMENTS ON 3RD PARTY
SUBMISSIONS'**

**WASTE LICENCE APPLICATION
NO. 204-1**

**PROPOSED INTEGRATED WASTE
MANAGEMENT FACILITY**

AT

**WHITESTOWN LOWER
CO. WICKLOW**

AUGUST 2004

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- APPENDIX 1** Details on Requests for Wicklow County Council technical Information.
- APPENDIX 2** Copies of Two Correspondences to Wicklow County Council, Requesting a Meeting to Discuss Disposal of Leachate at Baltinglass Waste Water Facility.
- APPENDIX 3** Copy of Wicklow County Council Letter, February 1999, Proposal to the Previous Owner of the Site to Develop the Site as a Landfill.
- APPENDIX 4** Table – Waste Flow Scenario.

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Brownfield Restoration Ireland Ltd.

Proposed Integrated Waste Management Facility

Whitestown Lower, Co. Wicklow

EPA Reference No. 204-1

'Comments on 3rd Party Submissions'

1.0 Preamble

Environment & Resource Management Ltd. (ERML) is acting on behalf of Brownfield Restoration Ireland Ltd. (BRI), in relation to the Whitestown Lower Integrated Waste Management Facility Licence Application (EPA Ref. No. 204-1).

Following a visit to the Environmental Protection Agency Public Office on 14 July 2004 by ERML staff, the following report has been prepared by ERML under the instruction of BRI. This report includes comments on third party submissions and relates directly to documents gathered during the public office visit and a subsequent follow-up enquiry by ERML on 06 August 2004.

This report is not intended to address individual concerns from each of the third party submissions, rather the objective of this report is to make technical comments in relation to some of the key points made by the third parties. A number of unfounded allegations are also addressed.

2.0 Unfounded Allegations

2.1 The Emer Bailey submission dated 21 April 2004 (EPA Submission No. 9) states the following:

"... Council officials refer to Brownfield Restoration Ireland Ltd. as a subsidiary of A1 Waste, who are responsible for the illegal dumping in the first instance, they have already been found guilty in relation to the illegal dumping at Coolamadra, and therefore under the Waste Management Act would be deemed not fit to hold a waste management licence, similarly any related persons or associates would also be not fit to hold such a licence".

Please note that Brownfield Restoration Ireland Ltd. is not a subsidiary of A1 Waste, and is an independent company committed to the redevelopment of brownfield sites in Ireland. Please also note that Brownfield Restoration Ireland Ltd. have never been involved in any illegal waste management activities. There are no grounds to support the allegation that Brownfield Restoration Ireland Ltd. is unfit to hold a waste licence.

"...Their company was only inaugurated in September 2003 when the land was bought. They have NO track record of restoration of this nature and therefore are not competent even to be considered for the granting of such a licence"

The principle of BRI has been involved in the development and redevelopment of land for some twenty years. Additional technically competent staff will be hired for the project once the necessary permissions have been obtained.

2.2 The Florence Staunton submission dated 04 April 2004 (EPA Submission No. 6) states the following:

"Page 16 of Section 3 of the EIS states " a field investigation of houses, farms and businesses surrounding the site was undertaken on the 22nd and 23rd of January 2004" and from this it is deduced that the site is not visible from my house in Newtown. I have no memory of anyone coming to my house on such an investigation and am incensed to think that these people, whoever they are, have been snooping around my house unbeknownst to me. This amounts to trespass."

Professional Staff from ERML undertook the site investigation. The field investigations comprised a walking survey along public roads and a visual survey of the surrounding countryside from the site itself. At no time did anyone enter private grounds.

3.0 Eastern Regional Fisheries Board Concerns

A number of concerns were raised by the Eastern Regional Fisheries Board in their letter to the Agency dated 26 April 2004. Each of the concerns are dealt with in the numbered sequence presented in the Boards letter to the Agency.

3.1 Point No.1

This point relates to the nature of the wastes observed by ERML and the County Council.

Contrary to the Eastern Fisheries Board text, Section 2 of the EIS states:

"No hazardous wastes were found during this site investigation"
(Section 2.1, page 1 of 47, EIS)

"There was no evidence of hazardous or household wastes"
(Section 2.2 (1), page 2 of 47, EIS)

Also, the following is stated in Section 1.2, page 2 of 11 of the EIS:

"The wastes that were encountered by ERML appeared to consist of Commercial and Industrial (C&I) (as defined by the WMA, 1996) and

Construction and Demolition (C&D) wastes. There was no evidence of hazardous or household waste (or filled refuse sack or bags) noted during the December 2003 investigation"

The nature of the wastes on the site, as described in the March 2004 EIS were discerned from observations made of the materials excavated from 67 trial pits that were excavated and examined during the site investigations by the professional staff of ERML in December 2003.

The trial pit logs and other further details on the site investigation and laboratory investigations are contained in the Appendix 9 of the EIS - *Preliminary Risk Assessment Report*. That report fully describes the findings of ERML in regard to the nature of the wastes observed.

With regards to the Wicklow County Council Site Investigations and their subsequent conclusions on quantities and types of waste encountered on the site, neither BRI nor their consultants were party to these findings and results.

The County Council's technical information was requested by BRI and its consultants on numerous occasions:

- By BRI & their advisor at a meeting with the County Council on 03 October 2003 (as mentioned in 26 November 2003 letter, mentioned below);
- By BRI and Dr. Kevin McDonnell (consultant) at a meeting with Donal O'Laoire (County Council consultant) on 13 November 2003, (as mentioned in 26 November 2003 letter, mentioned below);
- By Dr. Kevin McDonnell in a letter to Mr. Donal O'Laoire on 26 November 2003;

The County Council declined to provide the requested technical information, in their correspondence dated 10th December 2003, stating:

"There is no question of anybody against whom these proceedings are being prepared or their agents being allowed 'look at all information on the file for the site'."

ERML wrote to the County Council on behalf of BRI on 23 December 2003 to respond to the above County Council letter and to clarify the situation in relation to the technical information held by the County Council. The letter stated that BRI:

"Understands and accepts your decision to not make the information available to them"

Copies of the above referenced three letters are attached in Appendix 1.

Therefore, to this date, BRI has no written documentary or physical evidence of the findings of the County Council in regard to the nature of the wastes encountered during the Council's investigations during 2002.

All information contained within the March 2004 EIS is based on ERML's site investigation in December 2003. However, though not encountered in their site investigation, BRI has not ruled the possible presence of hazardous or household wastes on the site:

If such wastes are encountered during the remediation of the sites, these will be appropriately dealt with in accordance with detailed written procedures that will have been agreed with the Agency in accordance with conditions of a Waste Licence for the facility. An outline of such procedures was provided in Attachments E.2 and E.3 of the Waste Licence Application documents submitted to the Agency with the EIS in March 2004.

3.2 Point No.2

This point relates to possible leachate escape and migration into the Carrigower River catchment and the groundwater.

We confirm that at present, the wastes have been deposited at the base of a former sand and gravel pit without any engineered lining system. The wastes have been capped with clay and also comprise a large portion of inert-like materials (e.g. soils & stones).

At present, there is a potential for leachate to be produced and to migrate towards sensitive water receptors. Leachate production is possibly already underway at the site. Whilst this may be the case, it does not yet appear to be causing any significant contamination to the surface water and/or groundwater.

BRI proposes in the Waste Licence Application and accompanying EIS and Drawings, to excavate all of the materials presently on site, to treat and process those wastes and to recover as much as possible. The residual wastes will be disposed of in an engineered lined landfill facility with an integrated engineered leachate management system. Upon implementation of these proposals, this risk of leachate escape and migration into the Carrigower River Catchment and the groundwater would be minimal.

3.3 Point No.3

Point No. 3 relates to Section 3.7.1.3.2 of the EIS and deals with groundwater vulnerability at the site, which is rated as EXTREME. We would disagree with the Boards comment:

"The siting of any new landfill would normally be in an area with Low Groundwater vulnerability"

A landfill may be located in areas Low, Moderate, High or Extreme vulnerability rating, once the GSI Publication entitled *Groundwater Protection Schemes, 1999, Section Groundwater Protection Responses for Landfills - Response Matrix for Landfills*, is followed.

As indicated in Section 3.7.1.3.3, the Whitestown Lower site is acceptable for the siting of a landfill, subject to certain guidance criteria. It is noted that the March 2004 EIS submitted to the Agency, as part of the Waste Licence Application for this site (Application Ref. No. 204-1), addresses these guidance criteria.

In particular, the March 2004 EIS (Section 3.7.1.3.4, page 20 of 54) identified the absence of downgradient groundwater users. In addition, BRI proposes to install leachate containment and collection systems that will meet the requirements of the EPA and also the EU Directive on the Landfill of Waste to ensure that the risk of contamination to the underlying groundwater environment is minimal.

As also mentioned in Point No. 3, Section 3.4.5 of the EIS addresses the 'worst case scenario' (i.e. if the landfill were left unlined, with no engineered leachate containment and collection system). However, once the recommended mitigation measures are implemented, including the construction of an engineered lined landfill facility (Section 2.7 of the EIS) with integrated engineered leachate management system (Section 2.8 of the EIS), this risk of leachate escape and migration into the Carrigower River Catchment and the groundwater, would be minimal. The facility will be designed to meet the EPA Guidelines (for the design of landfills) and the EU Landfill Directive and will ensure the safety of the cSAC. This is the engineered solution, which the Eastern Regional Fisheries Board suggests has to be found.

3.4 Point No.4

This point relates to the treatment of dumped soil and gravels which have been contaminated by diesel/oil and other pollutants.

Firstly, during the ERML site investigations in December 2003, no obvious or substantial hydrocarbon contaminated materials or other polluted material were identified.

Additionally, BRI does not propose to accept any hazardous wastes such as soils/gravels that are contaminated by diesel /oil and other pollutants that may render such waste hazardous.

However, if such wastes are encountered (within incoming waste or recovered wastes), these will be appropriately dealt with in accordance with detailed written procedures that will be agreed with the Agency in accordance with conditions of a Waste Licence for the facility and in accordance with EPA Guidance Manuals, Council Landfill Directive (1999/31/EC) and the Council Landfill Decision (19 December 2002). An outline of such procedures was provided in Attachments E.2 and E.3 of the Waste Licence Application documents submitted to the Agency with the March 2004 EIS.

For example, any unacceptable previously deposited wastes found to have been contaminated by hydrocarbons, or any other hazardous

contaminants identified during the excavation of these wastes, will be segregated and stored in the waste quarantine area. Soils will be tested on site with assay kits or similar to determine acceptability. A licensed hazardous waste management contractor will then remove these wastes for appropriate treatment and their recovery/disposal off site.

3.5 Point No.5

This point relates to the liquid runoff from the Resource Recovery Building (RRB) and associated hardstand and the Boards concern that this liquid will not be considered Leachate and thus will become a potential source of contamination to water sources.

To clarify Section 2.8.2.2, whilst the water runoff from the RRB and hardstand area will be considered as potentially contaminated liquid, it will not be Leachate per say. Nevertheless, it WILL be treated as leachate and will be managed by the engineered leachate management system, therefore eliminating its potential risk to the environment.

The actual route of water drainage from the RRB and associated hardstand will be firstly to drain into the silt tank, from where the water will drain into the 'lined potentially contaminated surface water holding tank', located in the proposed Phase 5 of the landfill development, from where the water will either be pumped to the lined cell of the leachate holding tank, from where the leachate will be taken for authorised disposal. The route of the water treatment is shown on Drawing No. BRI/103 of the EIS.

3.6 Point No.6

This point deals with the disposal of leachate from the facility.

Section 2.8.3.5 proposes that the leachate will be removed by vacuum tanker to the wastewater treatment plant at Baltinglass, Co. Wicklow.

A letter which requested a meeting with Mr. Sean O'Neil of the environmental section of Wicklow County Council to discuss the disposal of leachate at the Baltinglass facility was sent on 23 February 2004 and again on 05 March 2004. A response to this request has not yet been received.

Copies of these correspondences are attached in Appendix 2.

3.7 Point No.7

This point deals with the disposal of wash water and silt from the proposed facility wheel wash.

As stated in Section 2.10 of the EIS (page 31 of 47), "*the liquid from the wheel washes will be drained back into the landfill*".

Once within the landfill, the water will be treated by the Leachate Management System, as described in Section 2.8 of the EIS.

As a matter of routine maintenance, the silt from the wheel wash and other silt separation tanks will be cleared regularly and deposited in the landfill.

4.0 Other Concerns

Third parties expressed a number of other concerns. The concerns may be summarised under the following topics:

- Noise Issues;
- Traffic issues;
- Landfill Gas and odours;
- Flares;
- Landscape;
- Vermin Nuisance;
- Suitability of Subsurface Environment;
- Risk to water;
- Legitimising Illegal Dumping;
- Contravenes Waste Management Plan and County Development Plan.

4.1 Noise Issues

Five submissions to the EPA from third parties indicated a concern about increased noise levels, from the facility, should a Waste Licence be granted.

As stated in Section 2.15.6 of the EIS, expected noise emissions will result from two main activities, namely:

- During construction and excavation;
- Waste recovery and disposal activities.

Noise emissions during construction and excavation are not expected to exceed the EPA emission values at the site boundary for scheduled activities of this nature during the period. This is due to the fact that most of this activity will take place below the current surface, therefore the existing topography should attenuate any noise emissions.

As much of the waste recovery as possible will be undertaken within the Resource Recovery Building, noise emissions will be contained. Where wastes are being excavated, the Mobile Recovery Unit will be positioned to avoid emission limits at the facility boundary.

Section 3.9 of the EIS deals with noise in terms of the existing environment (which included baseline environmental noise survey), emissions, mitigation measures and likely significant impacts.

The section concluded that the site is presently impacted by noise from traffic on the N81 and the active quarry south of the site, that noise emissions will result from the activities listed above, but that if mitigation measures during the construction and excavation stage and during the operation of the waste recovery and disposal processes are instigated that it is predicted that there would be no significant impacts upon the noise environment.

4.2 Traffic issues

Six third party submissions to the EPA voice their concerns about increased traffic levels on the N81, should a Waste Licence be granted.

As discussed in Section 2.15.8 of the EIS, expected traffic emissions from the facility over its 10-year lifespan are expected to be in the order of:

- 33 HGV per day, carrying materials to the facility and leaving empty;
- 20 HGV per day, carrying soils from the site and arriving empty.

There will also be construction traffic for 3-4 months per year.

The existing traffic environment, potential emissions, description of likely impacts, mitigation measures and likely significant impacts are discussed in Section 3.6 of the EIS and in a full Traffic Assessment Report, published by an independent traffic consultant, attached in Appendix 8 of the EIS.

It is concluded in the EIS that an increase in traffic and HGV content on the N81, as a direct result of the proposed development is likely to be less than 2.2%. These increases are not considered to be significant.

4.3 Landfill Gas and Odours

Two submissions to the EPA from third parties voice their concerns about landfill gas and odours from the facility, should a Waste Licence be granted.

As stated in Section 2.15.3 of the EIS, the gas production rate and the design of the gas management systems will govern the emission level, rate and quantity.

Active collection and a backup system of passive venting through the capping system are proposed for the facility (Section 2.9 of EIS). These systems will relieve gas pressure in the landfill and thus mitigate the potential for advection and diffusion of gas through the base and side slope liner systems. Research has shown that emission rates through landfill caps (as planned for the facility), with a clay barrier are relatively low.

Depending on the levels of gas extracted, the gas may be passed through a flare system and possibly through a gas utilisation plant.

Once the active system for gas collection and extraction is in place, it is predicted that there will be no significant impacts upon air quality caused by the generation of landfill gas (Section 3.1.3 of EIS).

Section 3.1.2 of the EIS deals with odours in terms of the existing environment, potential emissions, mitigation measures and likely significant impacts. The section concludes that there is a potential for odour release. However, strict mitigation measures to control such emissions are presented and it is anticipated that there will be little or no impact on the surrounding environment.

4.4 Flares

Concerns by a third party have been expressed to the EPA in relation to the possible use of flares at the proposed Whitestown Lower Integrated Waste Management Facility. It is noted that modern day landfill flare installations are typically enclosed units, thus eliminating the visual impact traditionally associated with these units.

It is further noted that the previously deposited wastes are emitting landfill gases in their current state. Any active or passive flaring system installed at the Whitestown Lower site, as part of the proposed integrated waste proposals for the site, will result in the treatment of these fugitive emissions.

4.5 Landscape

Four submissions to the EPA from third parties voice their concerns about the effect the proposed facility would have on the landscape, 'an area of natural beauty' should a Waste Licence be granted.

A full report on landscape and Visual Impact Assessment was prepared by an independent consultant, as part of the EIS and is attached in Appendix 13 of the EIS and is summarised in terms of existing environment, potential emissions, description of likely impacts, mitigation measures and likely significant impacts in Section 3.8 of the EIS.

The section concludes that the site (a disused sand & gravel pit, sections of which are backfilled with imported wastes) has never been subjected to remedial measure and in consequence has disfigured the otherwise attractive and valuable landscape, or 'area of natural beauty'. It is agreed that temporary construction works will have a visual impact, but proper selection of the location for built elements will reduce the degree of temporary impact. Also, once the plantings (recommended to be installed around the perimeter of the site) mature, the visual impact of the construction works will be hidden.

In the long term, the proposed works on the site will bring the site back to neutral, i.e. to blend in with the surrounding landscape.

As stated in Section 3.8.5 of the EIS:

A 'worst case' scenario would arise only if the site was left in its present condition or if the finished grades were, in terms of size and bulk unsympathetic to the ambient landscape upon completion. Implementation of the remedial measures and the associated planting works will ensure a very significant reduction of the current impacts, and the harmonious reinstatement of the landscape.

4.6 Vermin Nuisances

One submission to the EPA from a third party voiced her concerns about increased rodent and carrion populations, should a Waste Licence be granted.

It is anticipated that vermin and flies will not be a significant issue at this site. As a precaution a specialist contractor will be retained to carry out regular monitoring. Vermin prevention and control measures will be implemented by BRI in accordance with the conditions of a Waste License.

4.7 Suitability of Subsurface Environment

Two of the third party submissions made to the EPA suggest that the land is unsuitable for a landfill facility, due to the "porous nature of the land", having a "sand and gravel bed with no clay deposits underneath" and "situated on a highly permeable sand and gravel deposit".

As discussed in Section 3.3 above, the site is located in an area of EXTREME groundwater vulnerability, with the underlying aquifer classified as Li (Locally Important). Using this information, the GSI Publication entitled *Groundwater Protection Schemes, 1999, Section Groundwater Protection Responses for Landfills – Response Matrix for Landfills* classifies the site with a protection response of **R2²** for landfill. As outlined in the GSI response matrix, the following guidelines apply:

Acceptable subject to guidance outlined in EPA Landfill Design or conditions of waste licence:

- *Special attention should be given to checking for the presence of high permeability zones. If such zones are present, then the landfill should only be allowed if it can be proven that the risk of leachate movement to these zones is insignificant. Special attention must be given to existing wells down gradient of the site and to the projected future development of the aquifer*
- *Groundwater control measures such as cut-off walls or interceptor drains may be necessary to control high water table or the head of leachate may be required to be maintained at a level lower than the water table depending on site conditions.*

To comply with the above conditions, the landfill must be designed to include an engineered liner system, as discussed in Section 2.7.5 of the EIS.

"The lining system on the base will be a composite liner that will comprise a layer of compacted clayey silt (i.e. a compacted clay liner – CCL) a minimum of 1 m thickness and a 2 mm thick high density polyethylene (HDPE) geomembrane. The soil liner will have a coefficient of permeability of less than 1×10^{-9} m/sec. The provisional design levels for the top surface of the base liner will be as shown on Drawing BRI/110, Rev A. The proposed base levels are dictated by the water table level beneath the floor of the sand and gravel pit, and the need to create a positive grade for gravity flow of leachate towards sumps where pumps will be installed in the leachate collection system. The base liner design concept is illustrated on Drawing BRI/110, Rev A".

4.8 Legitimising Illegal Dumping

Three of the third party submissions made to the EPA suggest that by granting a Waste Licence to BRI for the Whitestown Lower site, the EPA would be in some way legitimising illegal dumping in Ireland.

The granting of a Waste Licence for the proposed facility, will in no way legitimise illegal dumping. The licence would simply offer a solution to the remediation of the "illegal dump" at Whitestown Lower and aid in the remediation of a number of other illegal facilities in Co. Wicklow, by allowing disposal and recovery of wastes from these facilities. The developer expects that the implementation of the "Polluter Pays Principle" will ensure that those who illegally disposed of wastes at the site will be required to fund the remediation.

4.9 Outstanding Civil and Criminal Charges

BRI have never carried out any unauthorised waste activities and they have no outstanding criminal proceedings against them.

BRI proposes to begin the site remediation as soon as possible. It is understood that BRI, as the current owners may be involved in the civil case to clean up the site. BRI have no issue with this and in fact propose such a clean up in the Waste Licence Application.

Four of the third party submissions made to the EPA suggest that the Waste Licence Application should not be considered whilst there are outstanding civil and criminal charges against the owner of the land, the previous owner of the land and those involved in dumping on the land.

If awaiting the conclusion of all legal proceedings associated with the site, the remediation may not begin for a number of years. This would not be in the best interests of environmental protection, as it may allow possible contamination from the unlined landfill to contaminated the surrounding environment over time.

4.10 Contravenes Waste Management Plan and Wicklow County Development Plan

Three of the third party submissions made to the EPA suggest that a granting of a Waste Licence for the site would contravene the County Wicklow Waste Management Plan and/or the Wicklow County Development Plan.

The County Waste Management Plan was discussed in Section 3.5.1.5 of the EIS, in which a number of policies are outlined, which would support the development proposed.

The County Development Plan is discussed in Section 3.5.1.4 of the EIS, in which a number of policies are outlined, which are relevant to the proposed remediation and restoration project at the site.

In the meantime, the Regional Planning Guidelines for the Greater Dublin Area 2004-2016 were published by the Mid-East Regional Authority and the Dublin Regional Authority on 8 July 2004. These guidelines apply to the geographical areas of Dublin City, Fingal, Dun-Laoghaire-Rathdown, South Dublin, Kildare, Meath and Wicklow. The objective of the Regional Planning Guidelines is to provide a long-term (12-20 years) strategic planning framework for the development of the region and implement the National Spatial Strategy.

Relevant excerpts relating to waste management which are pertinent to the Whitestown proposed development are as follows:

Executive Summary (Page 73) –

An interregional solution should be sought, through the liaison and cooperation between relevant parties, to address the critical lack of waste disposal infrastructure within the Greater Dublin Area (GDA) (which includes Wicklow County).

Section 8.6.3 –

From a strategic perspective, the waste management industry (which includes Planning Authorities and private operators) should aim to develop integrated waste management facilities infrastructure in the Greater Dublin Area (GDA). This infrastructure includes new landfills, waste to energy plants, biological treatment and recycling facilities. In developing this infrastructure, provision should be made to:

- *Develop biological treatment facilities for organic waste, further recycling and waste to energy plants to serve the needs of the GDA;*
- *Consider the requirements for new infrastructure in the context of the GDA, rather than the existing waste management regions.*

Section 8.6 -

In recent years, against the backdrop of increasing population levels and significant housing demand and supply, the existing services infrastructure throughout the GDA has experienced a dramatic increase in pressure. In response, significant levels of investment have been directed into the services infrastructure by the Planning Authorities in association with the relevant Government Departments. Planning Authorities should:

- Liaise and cooperate with each other and other relevant bodies to facilitate an inter-regional solution to address the critical lack of waste disposal infrastructure.*
- Provide integrated waste management facilities."*

The issue of inter-regional transfer of wastes is further stressed in Section 8.6.3 -

Private sector proposals to develop landfill sites in Wicklow, Kildare and Meath are likely to be developed in the medium term. Should such proposals proceed, the transferring of waste between regions could be reconsidered so as to give flexibility in dealing with waste management at a regional level. New facilities should be allowed to perform their required function in one region and also form part of the wider strategy that includes waste management in another region.

From a strategic perspective, the waste management industry (which includes Planning Authorities and private operators) should aim to develop integrated waste management facilities infrastructure in the GDA. This infrastructure includes new landfills, waste to energy plants, biological treatment and recycling facilities. In developing this infrastructure, provision should be made to:

- Provide for growth in the regional capacity for integrated waste management so as to mitigate the escalating costs of waste disposal;*
- Permit interregional transfer of waste to give appropriate economies of scale to integrated waste management facilities;*
- Consider the requirement for new infrastructure in the context of the GDA, rather than the existing waste management regions; and*
- Revision of the regional Waste Management Plans is required as a matter of urgency to take account of changes in demography, increases in waste volumes and improvements in waste management technology.*

It is clear from the above documentation, that there is a shift in the policy of waste transfer between existing waste management regions. In the case of the Whitestown site, this proposed site for an integrated waste management facility is located in Co. Wicklow, which is located within the Greater Dublin Area (GDA). As such, the interregional transfer of waste is

now recommended within the Greater Dublin Area, as indicated in the excerpts from the above-referred documentation.

5.0 Concerns of Wicklow County Council

Preamble

Wicklow County Council (WCC) made a submission on the 22 July 2004 in relation to this application. It is our understanding that the WCC essentially supports many aspects of the proposals by BRI apart from deposition of the residues, arising from the processing and treatment of imported non-hazardous wastes in the proposed residual waste landfill. The WCC in its outline Remediation Plan for the Whitestown Lower site suggests that the importation of materials and subsequent treatment of such material to make them inert and then use such material for restoration would be acceptable.

There are a number of specific points that BRI wishes to make in relation to the WCC submission

5.1 References

Page 1 of 13 of the submission -

To our knowledge, the documents indicated in the reference list are not in the public domain, except for the March 2004 EIS prepared by ERML on behalf of BRI. Thus BRI was not in a position to review, assess or consider any of the data, information and drawings or polices presented in the documents prepared by WCC and/its advisors/consultants. BRI and its consultants would welcome the opportunity to review the reference documents with the view to consolidating the findings of all investigations carried out at the application site and its environs. The EIS was based on studies and investigation commissioned by BRI and none of the information that had been gathered by WCC. BRI's objective is to remediate the site as soon as possible in accordance with the Polluter Pays Principal and by treating and imported wastes on a commercial basis. It is proposed that the site will be restored within a 10-year time frame.

5.2 Waste Quantities and Types

On Page 2 of 13 (Summary) -

Wicklow say 288,00 tonnes of waste were deposited at the site, whereas ERML have estimated between 220,000 to 260,000 tonnes of waste were deposited in three areas (i.e. Zones A, B and C).

Not all of the wastes were shredded. ERML has estimated a high portion of the wastes in Zones A to C are inert-like material ca. 80%, such as sand, soil and stone.

ERML found no household wastes in bags or refuse sacks. ERML did not find any putrescible wastes or vegetable matter.

5.3 Water Quality

Page 2 of 13 (Summary) -

BRI agree that down-gradient groundwater boreholes show signs of degraded water quality in respect of a number of groundwater parameters.

ERML evidence shows no deterioration of the surface water quality in the Carrigower River between Dec 03 and April 04. In fact the surface water quality upstream of the site is poorer than at the downstream boundary of the site in respect to ammoniacal nitrogen

5.4 Pending Legal Proceedings

BRI is not aware of any legal proceedings involving their company or has not been served with any notice in respect to a criminal or civil case being brought against it.

BRI has not carried out any illegal Waste Management Activities.

5.5 Development of a Landfill Site

Page 2 of 13 states that the Council made it clear that the development of a landfill at this site would be contrary to the County Development Plan. However, in regard to development as defined by planning legislation 'a landfill has been developed and exists at the site'. It is acknowledged that the existing landfill is unauthorised but it does constitute development. Further, WCC seem prepared to allow development of a landfill on the site - refer to the eight bullets on page 4 of 13, which relates to the Council's Outline Remediation Plan for the Whitestown Lower site.

In addition, in February 1999, WCC made a proposal to the previous owner of the site, that they would develop the site as a landfill (a copy of this letter is attached in Appendix 3).

5.6. Land Ownership

BRI owns the land, not Ann and Ray Stokes.

5.7 Wicklow's Policy Regarding Illegal landfills

BRI agrees with all of the activities outlined Page 3 of 13 and indeed proposes to carry all of these out at the Whitestown Lower site.

5.8 Outline Remediation Plan By County Council

1st paragraph - BRI agrees with this strategy.

3rd paragraph - BRI not aware of any legal address. BRI not notified in writing of any legal redress.

4th paragraph – BRI wish to deal with the environmental liability as evidenced by the Waste Licence Application. BRI is of the opinion that if the environmental liability is caused by the disposal of waste, then the Polluter Pays Principle applies and the liability lies with all of those persons who disposed the waste at the site.

5th paragraph and bullets - ERML cannot reconcile the quantity of wastes and the contiguous soil to be in the order of 1.4 million tonnes, particularly if the quantity of wastes is 288,000 tonnes

BRI is not familiar with the term 'safe soil making'

BRI agrees with all of the principles set out under the bullets.

5.9 Detailed Measures

Comments are provided below on the detailed measures proposed by WCC.

5.9.1 Remediation Plan

BRI proposes to carry this out. The March 2004 EIS and accompanying drawings present the required information.

5.9.2 Permits, Permissions and Licenses

A Waste Licence Application has been lodged by BRI to carry out the remediation of the site.

BRI does not understand why WCC is urging the EPA to refuse the waste Licence, when WCC's own document requires the notified parties to make applications to remediate the site.

5.9.3 Monitoring

Monitoring has been installed and further monitoring infrastructure will be installed. See Section 4 of the March 2004 EIS and Figure 4.1.

5.9.4 Covered Area

BRI proposes to use the existing shed on site and the Resource Recovery Building for segregation and storage of wastes.

5.9.5 On Site Processing

All of the plant suggested is proposed and will be considered for processing the in situ wastes.

5.9.6 Off Site Disposal of Hazardous Wastes

BRI does not intend to operate a hazardous waste management facility, thus any wastes that are found to be hazardous will be removed by an

experienced Hazardous waste company for recovery/disposal at an appropriate facility.

5.9.7 Health and Safety Training

BRI are aware of its requirements under current legislation and will provide appropriate training.

5.9.8 Waste Excavation Procedures

BRI will employ experienced environmental consultants to oversee the excavation of wastes.

5.9.9 Identification and Classification of Waste

BRI proposes to classify the wastes in accordance with requirements of the EPA. The system of classification will be based on EWC catalogue. The classification must be carried out on the separated components of the excavated wastes.

5.9.10 Recovery and Classification of Fines

BRI proposes to carry out this.

5.9.11 Recovery, Recycling and Reuse of Material

All of these activities are proposed by BRI including composting.

Our investigations revealed no putrescible wastes. Composting the timber and paper will require importation of green wastes.

5.9.12 Composting and Soil Making

This is proposed by BRI. Maturation of the compost will be carried out on the site.

5.9.13 Removal or Containment of Residual Wastes

Lined areas are proposed for disposal of residual wastes. The lined areas and the containment will satisfy BAT and will comply with the current requirements of the EU Directive on the Landfill of Waste. Unsuitable wastes will be recovered and/or disposed off-site.

5.9.14 Site Restoration

There is insufficient material on site to reinstate the site into a naturally sloping landform or ridge similar to what existed prior to quarrying activities. Materials will have to be imported to restore the site. The quantity of material to be imported will depend on the final contours. The guidance provided in the Agency's manual on Landfill Restoration will be considered and applied to the restoration contours and plan for the site.

5.9.15 Future Land Use

BRI proposes to cap and restore the site to agricultural use.

5.9.16 Ongoing Monitoring

BRI will undertake to carry out monitoring in accordance with the Waste Licence if so granted by the Agency.

5.9.17 Declaration of Environmental Remediation

BRI notes this requirement and the need to have the Agency agree to surrender or review the Waste Licence.

5.10 Compatibility of BRI Ste Development Plans with Wicklow County Council Policy and Outline Remediation Plan

An application for a Waste Licence has been made to the EPA by BRI that includes remediation and restoration the site. The proposals made by BRI were outlined to WCC officials in a meeting held in the Council's offices in Wicklow town on the 17 February 2004. BRI intends to cover the costs of remediation via obtaining funds from the parties responsible for the wastes on the site and by importing wastes on a commercial basis.

BRI proposals are compatible with the goals of WCC. The remediation and restoration will be carried out in accordance with the principals of WCC, as described above and in the Council's submission.

The County Council emphasises that the BRI proposal does not take into account the need to remediate 1,000,000 tonnes of wastes that are contiguous with the wastes. BRI's consultants have carried out tests on the soils within the waste zones and beneath the waste zones. The results of analytical tests do not indicate any significant contamination of the materials that are beneath or adjacent to the waste bodies (refer to Appendix 9 - Preliminary Risk Assessment Report, Section 5). The EIS suggests that up to 260,000 tonnes of wastes have been deposited on the site. These wastes cover a surface area of some 30,000 m². If the million tonnes of material suggested by WCC were soil then this would occupy a volume of over 500,000 m³. BRI is not aware of the location of this additional million tonnes of contaminated material. If it were below the wastes defined by the ERML investigations in December 2003 then the thickness of contaminated materials would be over 16 metres. This is not possible on this site as bedrock is close to the base of the pit - reference the geological cross sections presented on Drawing BRI/111 of the EIS. Even if this volume is spread out over an area of say half the site i.e. ca 7 ha, the materials would need to be over 7 metres thick on average. No evidence, drawings or computations have been submitted by WCC to support the suggestion that there is another 1,000,000 tonnes of contaminated materials on site that must be treated as stated in the middle box on page 8 of 13 of the WCC submission. BRI accepts that the estimate made by ERML of up to 260,000 tonnes of waste is just that, an estimate which is based on the site investigations. There could be

288,000 tonnes of waste, as estimated by WCC. BRI does not accept that there is more than 1 million tonnes of contaminated materials contiguous with the estimated quantity of 260,000 tonnes of waste.

The top box on page 9 of 13 of the WCC submission suggests the BRI proposal far exceeds what is necessary to remediate the site. However, this comment contradicts the assertion by WCC that 1,000,000 tonnes of material have not been accounted for and must be treated.

The WCC remediation plan includes importation of materials necessary for restoration contrary to the statements made in the middle box of page 9 of 13.

The top box on page 10 of 13 suggests that BRI proposal is to dispose of 180,000 tonnes of waste over an 8-year period. This implies 1,440,000 tonnes of waste are to be disposed in the landfill. This is not the case. The March 2004 EIS, page 12 of 47 in Section 2.7.3, indicates a net volume for disposal of wastes in the proposed residual waste disposal facility of 920,000 m³. The tonnage of material to be placed in this engineered landfill is estimated to be 782,000 tonnes as indicated in the EIS. The size of the engineered cells will need to be large enough to accommodate this quantity of waste and to restore the lands to natural landform.

It is proposed to import and process up to 180,000 tonnes. However, a significant portion of these wastes will be processed on site and residual materials will be exported from the site for further recovery, recycling or disposal. As indicated in Section 2.2 of the March 2004 EIS it is proposed to landfill approximately 100,000 tonnes of waste per annum over the 8-year period. An indicative model of a possible waste management scenario at the facility is shown on the attached table. This table shows potential flows of waste into and out of the site.

WCC does not indicate how much of the 1.4 million tonnes (if this quantity is correct) will be disposed on site or removed from the site.

The second box on page 10 of 13 suggests that the BRI proposal will result in the restoration of the site well after the time envisaged by WCC. The timetable for remediation of the site is within 3 years with full restoration of the site within 10 years. WCC does not provide a timetable for the remediation of the 1.4 million tonnes that it believes is on the site. So it not clear why the BRI is incompatible with the WCC's Remediation Plan in regard to timing.

The top box on page 11 of 13 suggests that importation of wastes increases the risk pollution. The importation of wastes will not increase risk as all of the facilities that are required for the remediation of the existing site and ensure minimal risk will be in place in any case. Only non hazardous wastes will be imported and treated. Any hazardous wastes will be quarantined and removed from the site.

5.11 Points of Compatibility / Incompatibility

BRI does not see any incompatibility issues in respect of scale of the development. If the Councils suggestion that 1.4 million tonnes of waste and contiguous material must be processed and treated, the facilities and time frame for the restoration of the site as proposed by BRI will be necessary. If the estimated quantity of waste on site has been underestimated by ERML, then the quantity of waste to be imported, treated and disposed on the site for restoration purposed will be reduced.

5.12 Public Consultation

ERML on behalf of BRI wrote to WCC requesting a meeting to discuss disposal of leachate at Baltinglass (letters attached in Appendix 2). Follow-up phone calls were also made. There has been no response from the council in respect of the request for a meeting.

It is acknowledged that the site is 5-miles or 8-km from Baltinglass, not 5km. This was a typographic error in the EIS.

Finally, transport of leachate by tankers is the norm in Ireland.

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