



Comhairle Chontae Chill Mhantáin

Wicklow County Council

Aras An Chontae
Cill Mhantáin
Telefón : (0404) 20100
Fax No : (0404) 67792
Intl VPN : 181 2100
E-Mail: envserv@wicklowcoco.ie
Web: www.wicklow.ie

Your Ref:

Our Ref:

Environment Section,
Wicklow County Council,
County Buildings,
Wicklow.
21 July 2004

Office of Licensing and Guidance,
E.P.A.,
PO Box 3000,
Johnstown Castle Estate,
Co. Wexford.

Re: Brownfield Restoration Ltd., licence application reference 204-1

Dear Sirs,

The site, the subject of this application, is one of the six sites investigated by Wicklow County Council as part of its comprehensive illegal dumping investigations which have been ongoing since 2001.

The site was formerly owned by John O'Reilly and legal proceedings are being taken by the Council against Mr. O'Reilly and those companies involved in depositing in excess of 288,000 tonnes on the site over a period of 4 years from 1998 to 2002. The Council has also joined the owners of the site, Brownfield Restoration (Ireland) Ltd, in such legal proceedings.

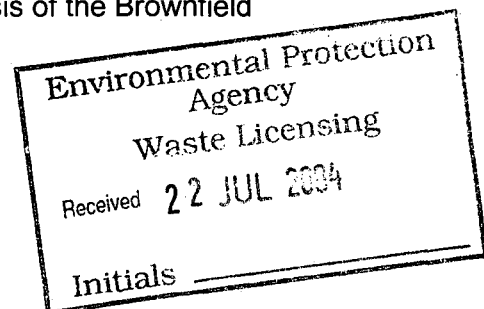
A complaint was also sent to the National Bureau of Criminal Investigations (N.C.B.I) regarding suspected 'criminal' activity in relation to illegal dumping on this site. A Book of Evidence has been sent to the Director of Public Prosecutions (D.P.P.) and as a consequence of same legal proceedings have been instigated.

The Council notes that the application lodged with the E.P.A. is for remediation of the material already on site at Whitestown and the importation of additional material. **The Council, while welcoming any moves to remediate the area where hundreds of thousands of tonnes of material have been illegally deposited, could not support any proposal to import any additional material. Wicklow County Council therefore urges the EPA to refuse the application by Brownfield Restoration (Ireland) Ltd for a waste licence at Whitestown.**

Attached is a document containing our detailed analysis of the Brownfield Restoration (Ireland) Ltd proposal.

Yours sincerely,

Michael Nicholson,
Director of Service
Environmental and Water Services.



All correspondence should be addressed to the Senior Executive Officer, Environmental Services

Seoltar gach comhfhreagras chuig Príomhfheidmeannach na Seirbhísí Comhshaoil

610 70



LICENCE APPLICATION REFERENCE NO 204-1

THE REMEDIATION AND MANAGEMENT OF A CONTAMINATED SITE AT WHITETOWN SAND AND GRAVEL QUARRY

SUBMISSION BY WICKLOW COUNTY COUNCIL REGARDING THE APPLICATION BY BROWNFIELD RESTORATION (IRELAND) LTD. FOR A WASTE LICENCE AT WHITETOWN, CO. WICKLOW.

REFERENCES

- WICKLOW COUNTY COUNCIL INVESTIGATION OF COMMERCIAL SCALE WASTE DISPOSAL AT WHITETOWN SAND AND GRAVEL QUARRY 2002
- WICKLOW COUNTY COUNCIL POLICY REGARDING THE REMEDIATION OF ILLEGAL LANDFILLS 2003
- DISCUSSIONS BETWEEN NOTIFIED PARTIES LINKED WITH WASTE DISPOSAL AT THE SITE AND WICKLOW COUNTY COUNCIL 2003/2004
- REMEDATION PLANS FOR WHITETOWN SAND AND GRAVEL QUARRY AND LEGAL PROCESS MAY 2004
- ENVIRONMENTAL IMPACT STATEMENT SUBMITTED BY BROWNFIELD RESTORATION IRELAND LTD TO EPA REGARDING A PROPOSED INTEGRATED WASTE MANAGEMENT FACILITY MARCH 2004

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COMPILED

BY

WICKLOW COUNTY COUNCIL

Environmental Protection Agency
 Waste Licensing
 Received 22 JUL 2004
 Initials _____

SUMMARY

In November 2001 Wicklow County Council discovered a large, commercial scale waste landfill operation in a sand and gravel quarry at Whitestown Lower, Stratford on Slaney Co Wicklow.

The investigation identified three major areas of contaminated land within the quarry and estimated that in excess of 288,000 tonnes of waste had been transferred from Waste Transfer Stations in Dublin.

The waste, consisting of domestic, commercial, and industrial categories, had been shredded and compacted prior to disposal at the site.

The investigation concluded that an environmental risk had been created contrary to Section 32 of the Waste Management Act 1996 on the site, which is adjacent to the Carrigower River floodplain and which is soon to be designated a Special Area of Conservation (SAC).

Wicklow County Council and the Environmental Protection Agency has monitored that site since discovery and the data has shown that the site is not contained and contaminants are migrating from the site and reaching vulnerable receptors. This data demonstrates that actual pollution is occurring.

Elevated levels of ammonia, arsenic, sodium, boron, barium, manganese and other compounds are identified in this inter-calibrated data indicating a migrating plume of pollution that is impacting on groundwater.

The Eastern Region Fisheries Board has reported a year on year deterioration in water quality in the Carrigower River since 1998, which may be related to the commencement of intense commercial scale waste disposal activities in 1997.

Wicklow County Council requested Garda intervention to investigate criminal aspects of the illegal waste disposal activity. A file was prepared for the DPP and charges were brought against seven named individuals at a sitting of the district court in Baltinglass in January 2004.

Wicklow County Council prepared a civil case to seek legal redress and specifically the application of the polluters pays principle to fund costs associated with the environmental remediation of the site.

The Council wrote to a number of corporate entities that were incriminated by evidence recovered at the site to seek the voluntary remediation of the site by these notified parties.

Initially there was no response to the County Council's invitation to enter into discussions. However, following the opening of the criminal case A1 Waste came forward in February 2004 and sought to enter discussions. No other incriminated corporate entities came forward.

In 2003 the owner of the site, John O'Reilly, sold the lands consisting of 14.6 hectares to Ray and Ann Stokes trading as Brownfield Restoration Ireland Ltd (BRI).

BRI met with Wicklow County Council following the purchase of the site in 2003 and proposed a development that involved the setting up of a facility on site that would process waste including the waste already deposited, waste imported from other illegal waste dumps in Wicklow and the importation of new waste on a commercial basis. The County Council made it clear that the development of a landfill at this site would be contrary to the County Development Plan. It was made clear that the singular objective of the County Council was the environmental remediation of the site.

Nevertheless Wicklow County Council was prepared to enter into technical discussion with BRI to seek agreement on the remediation option.

Technical discussions commenced with BRI in October 2003. These discussions did not achieve the desired objective and were abandoned.

BRI appointed consultants to prepare an Environmental Impact Statement (EIA) to support an application to the Environmental Protection Agency (EPA) for a Waste Licence to facilitate the BRI development vision for the site. The EIA was submitted to the EPA in March 2004.

Technical discussions commenced with A1 Waste in February 2004, and over a series of structured meetings a consensus was achieved on the most appropriate remediation option for the site.

This consensus was described in an Outline Remediation Plan for the site.

The Outline Remediation Plan is now be the subject of a civil legal prosecution by Wicklow County Council to require the notified parties associated with the Whitestown site, including BRI as the new owners of a contaminated site, to implement the specified technical measures derived from the Outline Remediation Plan.

The implementation of the Outline Remediation Plan has been costed and cost estimates have been provided to support both the criminal and civil redress processes. The estimated cost of remediation of the Whitestown site including recovery of Wicklow County Council costs is €8,300,000.00.

This synopsis will examine the compatibility of three interconnected elements in the process described above:

- o Wicklow County Council policy regarding illegal landfills.
- o The Outline Remediation Plan for the Whitestown site.
- o The compatibility of BRI site development plans with Wicklow County Council policy and the Outline Remediation Plan.

The synopsis will draw conclusions.

WICKLOW COUNTY COUNCIL'S POLICY REGARDING ILLEGAL LANDFILLS

Wicklow County Councils 'General Policy Regarding Remediation of Illegal Landfills' takes account of the site specific nature of each proposed solution and that site remediation plans could involve all or some of the following integrated activities:

- o The excavation of waste bodies on the site including contaminated surrounding soils
- o The segregation of waste from the soils and surrounding material.
- o The segregation of the waste into specific fractions
- o The processing of the waste fractions to alter characterisation and waste category
- o The removal of waste fractions to authorised facilities for disposal, processing or reuse
- o The construction of a properly engineered contained repository area on the site where residual waste and contaminated soils may be stored
- o The grading and capping of the former illegal landfill areas to reduce water ingress into those soils
- o The installation of down gradient monitoring boreholes to monitor changes over time
- o On going monitoring of the site for an agreed period.

THE OUTLINE REMEDIATION PLAN FOR THE WHITESTOWN SITE

Wicklow County Council considers that the most appropriate remediation option is to remove the waste from the land filled areas, to treat the waste on site, to segregate nominated fractions and to dispose or recover this material in appropriate off site facilities, to contain residual waste and to restore the site.

The Outline Remediation Plan for the Whitestown site was the subject of technical discussions between Wicklow County Council and A1 Waste, one of the parties implicated by evidence on the site. Consensus was reached on the measures to be undertaken to achieve the remediation objective during these discussions.

These measures are now the subject of a legal redress process initiated by Wicklow County Council inviting all parties implicated in the contamination of the Whitestown site to voluntarily commit to implementing the specified measures.

The legal redress process will be taken under the Waste Management Act and will seek undertakings from the notified parties including BRI who knowingly purchased a contaminated site thereby incurring the environmental liability associated with the site.

The undertaking that is required from the notified parties will be consistent with the principles set out as follows:

- o The excavation of the waste body and the contiguous soils estimated to be in the order of 1,400,000 tonnes
- o The screening of this material to remove soils from waste
- o The segregation of the recovered waste into fractions
- o Composting of putrescible waste and conversion to compost
- o Safe soil making
- o The removal of recovered material and recyclables off site
- o The disposal of hazardous material
- o The construction of an engineered landfill on site to retain residual wastes
- o Restoration of the site
- o Continuous monitoring of the site

DETAILED MEASURES

Remediation Plan

The notified parties will undertake to provide a remediation plan for agreement which will identify the area, or areas of waste to be excavated and remediated, the sequence in which the area, or areas of waste will be addressed, the likely timing of such remediation and the establishment of an appropriate environmental monitoring programme, including media and parameters to be monitored, identification of necessary monitoring infrastructure and determination of appropriate duration of such monitoring.

Permits, Permissions and Licences

The notified parties will undertake to make application to the appropriate authorities for such permits, permissions and licences that may be required to implement the agreed remediation plan. Such applications will be consistent with the agreed remediation plan.

Monitoring Infrastructure

The notified parties will undertake to install the necessary monitoring infrastructure on or in the proximity of the site and to commence of necessary environmental monitoring and to report such results in accordance with the remediation plan and applicable licences or permits.

Covered Area

The notified parties will undertake to build a roofed, secure Waste Quarantine Area with a low-permeability concrete base and a leachate collection sump for the purpose of temporary storage and segregation of excavated waste.

On Site Waste Processing

The notified parties will undertake to provide suitable processing equipment on the facility, such as excavators, screeners, trammels, shredders, compost tunnels or other technologies considered appropriate and for the construction of any infrastructure, such as a Picking Station, needed.

Off Site Disposal of Hazardous Waste

The notified parties will undertake to make appropriate arrangements with a suitably qualified and experienced Hazardous Waste company to provide for the removal and recovery or disposal at an appropriate facility, either here or abroad, of any hazardous waste encountered.

Health and Safety Training

The notified parties will undertake to provide appropriate training to site staff in how to handle any wastes, including any hazardous wastes, which may be encountered during excavation and for the identification and management of other hazards typically associated with waste landfills.

Waste Excavation Procedures

The notified parties will undertake to put in place appropriate procedures for the excavation of waste. For example, the waste may be excavated in a series of 50m square quadrants and the excavation of all waste should be supervised by an appropriately qualified person.

Identification and Classification of Waste

The notified parties will undertake to put in place a system to identify and classify excavated waste. This system would be supervised by a qualified person and be supported by appropriate scientific analysis capability. The identification and classification system will be critical to the streaming of fractions to appropriate recovery or disposal facilities.

Recovery and Classification of Fines

The notified parties will undertake to screen excavated wastes through a finger screener to remove fines. These fines should be stockpiled to provide for the reinstatement of the site. Appropriate testing should be carried out to ensure that these fines are fit for use. The fines may be passed through a trommel if the amount of contraries present requires reduction.

Recovery, Recycling and Reuse of Material

The notified parties will undertake to put on place a system for the recovery, recycling and reuse of material. The residue from the finger screener, or screeners, should be examined to determine their gross content. If there is sufficient quantities of recyclable materials present, such as wood, metal, stone, concrete, etc, then the waste should be passed through the Picking Station and these materials separated, stockpiled and, in the case of metal, sent off-site for recovery at an appropriate facility. Separated materials, such as wood, stone, concrete, etc should be stockpiled on site as they may be useful for the restoration of the site. For example, the stone etc may be useful for the construction of internal roads, drainage etc, while the wood may be useful if there is sufficient putrescible waste on the site to allow for compositing to be carried out.

Composting and Soil Making

The notified parties will undertake to put in place appropriate technical facilities for the conversion of wastes into compost and soil. Residue from the Picking Station and any residue from the finger screeners which are not suitable for passing through the Picking Station should be examined to determine their content. Putrescible wastes should be separated, for example by trammelling, and subjected to a treatment process on site, such as composting. Provision should be made for sufficient areas to enable the maturing of the compost. Any compost produced will be useful in the restoration of the site and, if of appropriate quality, may be used as top-soil on the restored site.

Removal or Containment of Residual Wastes

The notified parties will undertake to provide for the offsite removal of residual waste or for the appropriate on site containment of such waste. Consideration should be given to further treatment, such as shredding, of this residual waste to obtain any further recyclable materials from it. The final residue should consist mainly of paper, plastic, textiles etc. This material should either be removed from the site to an appropriate facility for its ultimate recovery or disposal, or, depending on the characteristics of the site, consideration should be given to the development of an engineered lined area, or areas, to provide for its safe disposal on site;

Site Restoration

The notified parties will undertake that the measures described above should be continued until all the waste on the site has been excavated and treated. The site should be restored to agreed final contours using the stockpiles on site and, if necessary, by the importation of suitable restoration materials. Materials in this context are defined as being chemically and biologically stable and therefore inert, or rendered such by processing or treatment on site prior to use for restoration purposes.

Future Landuse

The notified parties will undertake to appropriately cap and restore the site to facilitate the future agreed use of the land.

On Going Environmental Monitoring

The notified parties will undertake to continue an ongoing environmental monitoring programme to agreed parameters and time constraints.

Declaration of Environmental Remediation

The notified parties will be relieved of liability when a declaration of environmental remediation is made by the revocation or review of the licences, permits and permissions issued to facilitate the remediation.

COMPATIBILITY OF BRI SITE DEVELOPMENT PLANS WITH WICKLOW COUNTY COUNCIL POLICY AND OUTLINE REMEDIATION PLAN

The notified parties, including BRI, have (or shortly will be) invited to 'undertake to make application to the appropriate authorities for such permits, permissions and licences that may be required to implement the agreed remediation plan. Such applications will be consistent with the agreed remediation plan'.

The agreed remediation plan should be consistent with the Outline Remediation Plan as expressed in the measures above.

One of the notified parties, namely BRI, has proposed a development plan independently of technical discussions with Wicklow County Council and had submitted an Environmental Impact Assessment to the EPA to support an application for a Waste Licence for the proposed activities on the site.

The following is an assessment of the BRI proposals compatibility with the Outline Remediation Plan.

Critical elements of the BRI proposal include the following:

The proposal describes the development and management of an Integrated Waste Management Facility at the Whitestown site.

BRI proposes to remediate and restore the site to its former agricultural status by:

- o Continuing with the processing of the remaining sand and gravel deposits
- o Excavating previously deposited wastes
- o Accepting wastes
- o Processing and treating wastes
- o Removing recovered wastes from the facility or using recovered wastes at the site
- o Maintenance of the infrastructure and plant
- o Filling the engineered lined void
- o Restoring the site

If these BRI activities are superimposed on the site remediation principles set out by Wicklow County council we can observe the following :

BRI PROPOSAL

Continuing with the processing of the remaining sand and gravel deposits

WCC REMEDIATION PRINCIPLE

Wicklow County Council is silent on this matter but there is the consideration that material being extracted from this site at the moment could be contiguous to the waste and therefore could potentially be contaminated.

BRI PROPOSAL

Excavating previously deposited wastes

WCC REMEDIATION PRINCIPLE

BRI claims that 240,000 tonnes of waste were deposited on the site without a licence. WCC estimates this figure to be of the order of 288,000. However WCC is of the opinion that over 1 million tonnes of material contiguous to the waste may be contaminated. BRI takes no account of this in its calculations. Both BRI and WCC use figures of 1.4 million tonnes in total. THEY ARE UNDER NO ACCOUNT THE SAME FIGURE. WCC is of the opinion that 1.4 million tonnes of material on site already needs to be treated, BRI proposes to import over 1 million tonnes of waste for treatment. THEREFORE, WCC IS OF THE OPINION THAT IF BRI OBTAINED A LICENCE FOR THE CURRENT PROPOSAL THEN UPWARDS OF 2.5 MILLION TONNES WOULD HAVE TO BE TREATED.

BRI PROPOSAL

Accepting wastes

WCC REMEDIATION PRINCIPLE

As WCC does not include for the importation of wastes so (except where material is required to restore the site) as part of the remediation proposal then procedures for the acceptance of waste are not applicable.

This is stated as follows in the measures detailed as undertakings required from the notified parties -

'The site should be restored to agreed final contours using the stockpiles on site and, if necessary, by the importation of suitable restoration materials. Materials in this context are defined as being chemically and biologically stable and therefore inert, or rendered such by processing or treatment on site prior to use for restoration purposes'

BRI PROPOSAL

Processing and treating wastes

WCC REMEDIATION PRINCIPLE

The BRI proposal is consistent with Wicklow County Council's position provided the processing and treating technologies are consistent with:

'The screening of this material to remove soils from waste'

The segregation of the recovered waste into fractions'

'Composting of putrescible waste and conversion to compost'

'Safe soil making'

Once again, WCC must point out that the extent of the BRI proposal far exceeds what is necessary to remediate the site.

BRI PROPOSAL

Removing recovered wastes from the facility or using recovered wastes at the site

WCC REMEDIATION PRINCIPLE

The BRI proposal is consistent with the Wicklow County Council position :

'The removal of recovered material and recyclables off site'

'The disposal of hazardous material'

Once again, WCC must point out that the remediation proposal only requires the treatment of wastes and contiguous materials already on site. The BRI proposal would lead to additional requirements due to the volumes of waste they intend to import.

BRI PROPOSAL

Maintenance of the infrastructure and plant

WCC REMEDIATION PRINCIPLE

Wicklow County Council would regard this as an integral part of any remediation operation. The maintenance would extend to the environmental monitoring platform.

BRI may need more plant and for a longer period than is necessary purely to deal with WCC remediation proposal.

BRI PROPOSAL

Filling the engineered lined void

WCC REMEDIATION PROPOSAL

Wicklow County Council envisages the construction of an engineered landfill – 'The construction of an engineered landfill on site to retain residual wastes' – from the remediation process.

This infers that the capacity of the engineered cell is limited.

The BRI proposal may be incompatible as the details propose to process and dispose of 180,000 tonnes of waste per annum for 8 years from three sources:

- On site or imported C&I, C&D and Household Waste
- Source separated recyclable waste brought on to the site
- Source separated organic wastes brought on to the site

Effectively WCC is stating that the size of the engineered cell proposed by BRI is likely to well in excess of that required to deal with the waste already on site.

BRI PROPOSAL

Restoration of the site

WCC REMEDIATION PROPOSAL

Wicklow County Council envisages that the restoration of the site is compatible with the re-grading of the site to agreed contours and providing a physical capping that can mitigate ingress onto to areas from where waste has been excavated.

However, the timetable of the BRI proposal suggests that the final restoration will not be carried out until well after the time envisaged by the WCC remediation plan.

BRI PROPOSAL

BRI propose to undertake ongoing monitoring and reporting of the status of agreed parameters.

WCC REMEDIATION PROPOSALS

Continuous monitoring of the site

Once again, WCC must point out that the scale of the proposed operation by BRI must result in an increased level of monitoring required. There must therefore be an increased risk of environmental pollution. Also because BRI propose to import over 1 million tonnes of waste there is an increased risk of the unknown and the need for increased vigilance and monitoring. WCC regards this as an important aspect of its submission as increased monitoring means greater costs for the developer.

POINTS OF COMPATIBILITY

Of the 9 points of comparison above there are 7 points, where BRI could claim that their proposal is effectively the same as WCC. As pointed out above, WCC is seriously concerned about

- the size of the proposed operation,
- the timetable of the proposed operation and
- the increased risks to the environment from the size of the proposed operation.

The two points of serious incompatibility are

- The proposal to import wastes.
- The proposal to infill the site to original contours with the residual of the processing of 1,400,000 tonnes of on site and imported waste at a rate of 180,000 tones per annum for 8 years.

DETAILED ANALYSIS OF POINTS OF INCOMPATIBILITY

The WCC Remediation Plan envisages that infrastructure is needed on site to implement the remediation plan.

The scale of the infrastructure is dictated by the following factors:

- The capacity to excavate possibly 1.4 million tonnes both initially imported wastes and contiguous materials
- The capacity to segregate 288,000 tonnes of waste from the extracted material
- The capacity to process and safely dispose / reuse / recycle of 288,000 tonnes of waste and residual contamination.

The BRI approach to the infrastructural requirement is similar to the WCC requirements except for the critical issue of SCALE.

The BRI infrastructural plan is based on:

Excavating the illegally disposed of waste on three landfills within the site, though only allowing for the 240,000 tonnes of waste illegally deposited but not the contiguous materials

Importing and processing of 180,000 tonnes of waste the processing and disposal capacity for the site is totalled at per annum for 8 years.

In the make up of this waste the 288,000 of existing waste is included.

Therefore the processing and disposal capacity for the site is calculated at 1.4 million tonnes over 8 years. **This Figure refers to existing and imported waste and is completely different from the 1.4 million tonnes of material that WCC estimates has to be excavated to remediate the existing waste plus contiguous materials.**

The BRI specified infrastructure includes the following:

- Mobile Recovery Unit
- Resource Recovery Building
- Central Composting Facility
- Paved Access Roads and Hardstanding with Adequate Lighting
- Security Fences and gates
- Weigh Bridge
- Wheel Wash
- Laboratory Facilities
- Site Accommodation
- Foul Sewage Treatment Works
- Waste Inspection and Quarantine Areas
- Plant sheds, garages and equipment compounds
- Fuel Storage areas
- Fire control System, including water supply
- Screening berms and enabling landscape
- Litter fence
- Engineered landfill to include:
 - ✓ Liner
 - ✓ Leachate collection
 - ✓ Leachate recovery and holding
 - ✓ Gas management
 - ✓ Capping

PUBLIC CONSULTATION

Wicklow County Council has taken note of the public consultative process that has arisen from the BRI proposal.

The council notes the submission made by the Eastern Fisheries Board and the concerns expressed in the context of the protection of the Carrigower river which is a candidate for SAC status.

That submission also focuses on the BRI plan to collect leachate on site and to dispose of leachate at the Baltinglass waste water treatment plant. The Council would point out that BRI has not requested permission from the Council to dispose of leachate at the Baltinglass plant, nor has the matter been discussed. We would like to point out that where BRI claim the distance to be 5km to Baltinglass, the actual distance is around 8km. Transporting leachate over this distance could lead to increased risk of environmental pollution. No mention of these risks has been included in the EIS.

CONCLUSION

The BRI proposal does include for the remediation of the illegally imported wastes. However, the proposal goes way beyond what WCC considers reasonable and necessary for the site.

WCC cannot support those elements of the proposal which go beyond simply remediating the illegally imported wastes and urges the EPA to refuse the application.

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