

INSPECTORS REPORT

Waste Licence Register Number: 60-2

Applicant: Louth County Council

Facility: Whiteriver Landfill, Whiteriver & Gunstown Townland, Dunleer, Co. Louth

Inspector: Damien Masterson

Inspector's Recommendation: That a revised Waste Licence be granted subject to conditions.

(1) Introduction

This report relates to an application by Louth County Council for a review of the existing Waste Licence for Whiteriver Landfill (Reg. No. 60-1, issued 10/10/00). The landfill was developed as a clay lined containment landfill in 1983. The facility is located in a rural area of County Louth in the townlands of Whiteriver and Gunstown. It is almost centrally located between three towns - Ardee (7km to the North West), Dunleer (5km to the North East) and Collon (4km to the south) and 1km north of the regional road linking Dunleer and Collon. The existing facility area is approximately 10 hectares with an existing landfill footprint of approximately 8 hectares. The western and northern boundaries of the facility are adjoined by a third class road. The applicant states that there are six dwellings within 500m of the boundary of the proposed extended site and that the nearest dwelling is within 62m of the boundary of the existing site. The applicant also states that there are 40 dwellings within a 1km boundary offset of the proposed extended site. The proposed extension covers 16.8 hectares, 8.4 hectares of which will be used for landfill with the remainder being used for screening berms and buffer zones.

The existing facility was designed in four phases consisting of eight cells. Five cells are lined using low permeability in-situ clay. The cell currently being filled is a fully engineered and lined cell. Phase 4 has not yet been developed.

The application for a review of the Waste Licence is primarily for the extension of the landfill by way of constructing six new engineered lined cells in two Phases (Phases 5 and 6) to the east of the existing landfill and for the continuation of landfilling in the remainder of the existing facility. The applicant states that the proposed extension will have capacity for approximately 1,248,000 tonnes of waste and that the remaining capacity in the existing landfill and the capacity of the proposed extension is approximately 1,654,500 tonnes. The applicant has also applied to increase the maximum annual tonnage acceptable at the facility from 20,000 tonnes per annum to 100,000 tonnes per annum. According to the applicant, this void capacity would be filled in approximately 17 years at maximum filling rates.

The classes of activity applied for by the applicant and that I recommend be granted are:

Waste Disposal Activities – 3rd Schedule

- Class 1/Class 5** Relates to the landfilling of municipal solid waste and commercial and industrial waste of similar composition (i.e. non-hazardous waste) in lined cells in both the existing and extended facilities.
- Class 4** Relates to the use of leachate and stormwater retention lagoons and the possible re-circulation of leachate.
- Class 6** Relates to the treatment of leachate at the facility.
- Class 7** Relates to the treatment of leachate at the facility.
- Class 12/Class 13** Relate to the deposit, compaction and storage of waste deposited by the public prior to landfill.

Waste Recovery Activities – 4th Schedule

- Class 2/Class 10** Relates to the use of compost or similar material in the restoration of the facility.
- Class 4** Relates to the use of subsoil, Construction/Demolition (C & D) waste or similar for the cover or restoration of the facility.
- Class 9** Relates to the use of landfill gas to fuel the gas flare or to generate electricity on-site in the future.
- Class 13** Relates to the storage of materials such as subsoil, topsoil, stone, C & D material or compost prior to use as cover, capping or in restoration.

Class 5 of the Third Schedule is the **Principal Activity** applied for.

The environmental impacts and associated mitigation measures at the existing facility are addressed in the Inspector’s Report (see appendix II) that accompanied the Proposed Decision for the existing Waste Licence 60-1.

EIS Required	Yes. I have carried out an assessment of the EIS and can also confirm that it is in compliance with the EIS Regulations.
Development approval from An Bord Pleanála.	Granted 10 th February 2003
Number of valid submissions received	11

FACILITY VISITS:

DATE	PURPOSE	PERSONNEL
28/06/02	Site notice check	Damien Masterson / Olivia Cunningham
24/10/02	Site inspection	Damien Masterson / Olivia Cunningham

Appendix I contains 1.) Drawing 2 (2001/160/01/LCC Rev A) entitled *Location of Activity Map* illustrating the regional location of the facility and 2) Drawing 2001-160-01-003 Rev A entitled *Site Plan* illustrating the proposed facility layout and site boundaries.

(2) Issues arising from this Application for Review

1. Interface between existing landfill and proposed new lined cells: The applicant has set out proposals to achieve one merged profile by the deposit of waste in the valley that would otherwise exist between the existing landfill and the new lined cells. The proposal incorporates the use of a HDPE liner and a flexible LLDPE liner over parts of existing filled cells. The proposed system includes provision for the collection of landfill gas beneath the flexible membrane and a leachate collection layer above the flexible membrane to direct leachate to the leachate collection system within the new cells. The final detailed design is to be agreed with the Agency under Specified Engineering Works (SEWs) (Condition 3.12.1).

2. Amendment of operational hours: To facilitate the increased scale of operations proposed for the facility, Louth Co. Council have applied to amend the operational hours of the facility by providing for pre-opening and post-closure activity on the site for up to one hour either side of the waste acceptance hours. It is proposed that the facility be open to accept waste for disposal between the hours of 8:00 a.m. and 5:00 p.m. Monday to Thursday inclusive, 8:00 a.m. and 4:00 p.m. on Friday and 9:00 a.m. and 2:00 p.m. on Saturdays. These hours of waste acceptance are reflected in Condition 1.6.1 of the recommended PD. I recommend that the extension of operational hours in the morning to before 8:00 a.m. be refused as I do not consider it appropriate or necessary to extend operational hours due to the potential noise impact of such operations during night-time that have not been justified on the basis of my assessment of the EIS. An additional hour for post-closure operations in the evening is reflected in Condition 1.6.2 of the recommended PD.

3. Surface water control / Diversion of stream to facilitate construction of extension: The development of the extended facility requires the diversion of a small stream which traverses part of the site of the proposed extension. Conditions 3.16 and 6.5 of the PD set requirements for this work and include provisions that address the concerns of the Eastern Regional Fisheries Board. Condition 6.5.4 of the PD requires the submittal of proposals for the continuous monitoring of discharges from the surface water retention pond.

4. Adequacy of management structure, staffing and supervision: Condition 2.2.1 d) of the recommended PD incorporates a requirement to submit proposals for the planned management and staffing structure at the facility taking account of the increased scale of operations. To date, the facility manager is only on-site part-time (i.e three days per week).

5. Restoration and aftercare: The applicant indicates that Phase 1 of the existing landfill has been permanently capped using a barrier layer of low permeability clay with a minimum depth of 1.0 m and approximately 300mm of topsoil. Condition 4.3.2 of the recommended PD requires an assessment of the adequacy of the cap in respect of the requirements of the Landfill Directive. The licensee is required to submit a programme to the Agency for agreement, taking account of the recommendations from a report on the assessment. Condition 4.1 also requires that revised restoration and aftercare plans be submitted to the Agency for its agreement, taking account of: requirements of the waste licence, the implications of the interface of new cells and side slopes of the existing landfill and the recommendations arising from the report required by Condition 4.3.2. The specification for final capping is set out in Condition 4.3.1.

(3) Facility Development

Lining

Condition 3.12.1 of the recommended PD sets out the requirements for the lining of all future cells as per the EU Landfill Directive, and specifies the lining for the interface between existing and new cells as detailed in Section 1 above.

Leachate Management

At the existing facility, collected leachate is pumped to a leachate storage lagoon where it is partially treated by aeration of the lagoon prior to tankering off-site for disposal at Drogheda Wastewater Treatment Plant (WWTP). Condition 3.18 of the PD requires a telemetry system to be installed. The licensee proposes to use Drogheda Borough Council WWTP for the disposal of leachate, Condition 6.6 sets requirements for the disposal of leachate and incorporates the consent conditions required by Drogheda Borough Council.

Landfill Gas Management

An active landfill gas collection system should have been installed at the facility by 10/04/02 under the existing licence. In response to a notification of non-compliance in relation to this issue, the licensee has suggested that the system will be in place by the end of September 2003. Condition 3.15.3 of the recommended PD requires its installation by 30th September 2003. The applicant intends to progressively install passive gas vents in new cells as they are filled and this is provided for in Condition 3.15.1 of the recommended PD. However, the condition also requires that activated carbon filters are installed on passive vents if required.

(4) Waste Types and Quantities

Conditions 1.4 and 1.5 of the recommended PD allow for Municipal, Commercial, Industrial and Construction and Demolition wastes to be recovered and disposed of at the facility. *Schedule A - Table A.1 Waste Categories and Quantities* limits the quantity of waste to be accepted.

The application was for a maximum tonnage of 100,000 per annum as per table B.10.1; however, *Table E.1.1 Waste Types and Quantities* of the application indicates 95,883 tonnes. The recommended waste tonnage is based on the detail of *Table E.1.1* and provides for the acceptance of a maximum annual tonnage of 96,000 tonnes. The disposal of sewage sludge to landfill was discontinued at the end of 2002. The applicant has applied to continue disposing of up to 300 tonnes of non-hazardous industrial sludges and the recommended PD provides for this quantity.

The recommended PD (Condition 5.3) also requires the development and submission to the Agency of Waste Acceptance and Characterisation procedures having regard to the *EU Decision (2003/22/EC) on establishing the criteria and procedure for acceptance of waste at landfills*. The PD also requires the pre-treatment of waste prior to acceptance at the facility and Condition 11.3 requires a report examining waste recovery options to contribute to the achievement of the recovery targets stated in national waste policies.

(5) Enforcement Summary

The Agency has issued 6 notifications of non-compliance for breaches of conditions of Waste Licence Reg. No. 60-1. The non-compliances relate to a number of issues including failure to put in place certain infrastructural works within the timeframes specified (e.g. waste inspection and quarantine area, landfill gas collection and flaring system and failure to replace groundwater monitoring boreholes), exceedance of the maximum annual tonnage of 20,000 tpa acceptable at the facility, the operation of two working faces, litter along site boundaries and inadequate covering of previously deposited waste. In relation to exceedance of the maximum annual tonnage acceptable, Louth Co. Council cited the unforeseen early closure of Drogheda landfill to household and commercial wastes and introduced quotas on waste contractors and the urban authorities of Dundalk and Drogheda to address the issue. Condition 3.7.1 of the PD requires the installation of waste inspection and quarantine areas within three months of the date of grant of the licence and Condition 3.15.3 requires that the landfill gas collection and flaring system be installed, commissioned and operational at the facility no later than 30th September 2003. Schedule A of the recommended PD sets limits on the quantities and types of waste to be accepted at the facility.

The Agency has also received six complaints in relation to the facility, the main issues raised being odour and noise from the facility, failure to cease accepting treated sewage sludge by the date specified in the licence and concerns regarding water quality in the vicinity of the landfill. The recommended PD includes controls for the prevention of odours and other nuisances at the facility including the provision of –

Daily and Intermediate cover (Condition 5.6), Nuisance Control (Condition 7) and sets emission limits for noise (Schedule C.1).

(6) Management and Control of Emissions to the Environment

Requirements for facility management and Environmental Management in general, reflect those set out in the existing Waste Licence.

It is stated in the application that the geology and hydrogeology of the site for the proposed extension is similar to that underlying the existing facility. On this basis, the groundwater vulnerability is classified by the applicant as being of a low vulnerability and the aquifer has been classified as locally important.

Monitoring locations and frequencies as specified in the relevant schedules of the recommended PD reflect the current monitoring regime as agreed with the Agency during the enforcement of the existing waste licence. Additional requirements for monitoring in the recommended PD include: additional monitoring locations as proposed in the application and the EIS; a requirement to carry out biennial biological monitoring of the receiving surface waters (Condition 8.11) and a requirement to submit proposals for the continuous monitoring of water in the surface water retention pond (Condition 6.5.4).

(7) Waste Management Plans

The Waste Management Plan for the North East Region 1999-2004 adopted by Louth Co. Council 27th July 2001 was considered. The Whiteriver Landfill is identified in the Waste Management Plan as providing medium to long-term capacity. It is also identified as providing “interim capacity” for County Louth as states that this central facility should be capable of accommodating Louth’s waste. The “interim landfills” are identified as requiring upgrading /improvements.

The plan does not identify any specific increase in the capacity of Whiteriver landfill; however, it does identify the need for landfill capacity for residual wastes in the region. Therefore, I consider that the proposed extension of the facility is consistent with National and Regional Policy and the identified interim waste capacity needs for Louth and residual waste capacity needs for the region.

(8) Submissions

A total of 11 valid submissions were received in relation to the licence application. I have had regard to all of the submissions in making this recommendation to the Board. Below is a summary of the main concerns raised in the submissions:

1. Stream Diversion

The Eastern Regional Fisheries Board raised concerns regarding the potential impact of the planned stream diversion on the Salmonid status of the White River. Another submission concurs with the concerns expressed.

Response

Condition 3.16.4 requires prior consultation with the ERFB and the agreement of an appropriate method statement for the diversion works and also includes a restriction on in-stream works to the period between May and September as requested by the ERFB.

2. Leachate Management and Control

Concerns are raised in the submissions in relation to the adequacy of the on site leachate collection, management and storage infrastructure to cope with the volumes of leachate that will be generated on the site. Concern is also raised over the capacity of the Dunleer and Ardee Wastewater Treatment Plants (WWTPs) to cater for the volumes of leachate to be disposed of from the facility. Ultimately it is feared that leachate will migrate off site and that the contaminated groundwater may affect private wells or contribute to contamination of surface waters. One submission also states that leachate from non-hazardous waste can contain hazardous substances with carcinogenic, teratogenic and mutagenic properties.

Response

Infrastructural requirements for leachate management are specified in Condition 3.14 of the PD. Conditions 3.12 and Condition 4.3 specify the lining and capping requirements to prevent the escape of leachate from the facility and to minimise the quantity of leachate being generated. In addition the applicant proposes to use the larger Drogheda Wastewater Treatment Plant (WWTP) instead of Dunleer or Ardee WWTP's. It is recognised that leachate arising from non-hazardous landfills can contain dangerous substances. As outlined above, the recommended PD sets out measures for the management, control and disposal of leachate and Schedule D.5 sets requirements for the monitoring of the quality of leachate including parameters that include dangerous substances such as List I/II organic substances, specified metals and non-metals, mercury and cyanide. These parameters also have to be tested at upgradient and downgradient groundwater and surface water monitoring locations.

3. Surface Water

The ERFB raised concerns regarding the protection of the Salmonid Status of the White River during the construction and operation of the facility. They also suggest that biological monitoring of the stream and main channel would be beneficial and that the water in the surface water retention pond should be monitored for COD. One submission refers to independent monitoring of surface water bodies in the vicinity of the landfill which indicated elevated levels of chlorine, ammonia, nitrites and phosphates downstream of the facility and suggests that leachate or contaminated surface water from the facility may have contributed to these elevated levels. Concerns are also expressed that a past incident of high bacterial counts in the Dunleer drinking water supply which has an abstraction point on the Whiteriver downgradient of the facility may be attributable, at least in part to contamination from the facility. The

same submission also expresses dissatisfaction with Louth Co. Council responses on the investigation carried out into contamination of the Dunleer drinking water supply.

Response

Condition 3.16 of the PD specifies the requirements for the management of surface water on-site. Schedule D.5 of the PD sets out requirements for the monitoring of Surface Water and Condition 8.11 requires biennial biological monitoring of the receiving stream and the White River. Condition 6.5.4 requires proposals for the continuous monitoring of the surface water retention pond discharge including Total Organic Carbon (TOC) which is an appropriate alternative to COD monitoring as recommended by the ERFB. Condition 6.5 prohibits the discharge of raw leachate, treated leachate or contaminated surface water to the White River catchment. Schedule C.4 of the PD sets out Surface Water Discharge limits.

I have reviewed the independent report referred to above and it is in my opinion inconclusive as to the source of contamination contributing to deterioration in water quality in the vicinity.

4. Groundwater Protection

A number of submissions raise concerns with regards the potential for pollution of groundwater by leachate from the landfill and in particular the risk of private wells becoming contaminated and one submission asserts that coliform contamination of such wells in the area by the landfill has already occurred. One submission questions the probability of the proposed groundwater monitoring regime detecting contamination. The submission also states that there has been no assessment of risk to any shallow groundwater wells which may be installed in the future or even post closure of the landfill while leachate from the waste deposited will continue to pose a risk. It points out that the EIS has no mention of a testing regime for local private wells.

Response

The recommended PD (Condition 8.8.1) requires that, subject to agreement of landowners, all private wells within 250 metres of the facility shall be included in the monitoring programme for groundwater. See also Response to Issue 2 above.

5. Nuisances

A number of submissions raise the issue of nuisance and other adverse effects from litter, flies, odour and dust and one submission refers to monitoring results which indicated levels of dust deposition in exceedance of the licence emission limit value of 350mg/m². One submission from a local resident indicates that due to the close proximity of his home to the phase of the landfill that is currently operational, he is adversely affected by odours and noise from the facility. It is also stated that littering and fly tipping along the Philipstown to Dunleer road is an issue and that this litter is never cleaned up.

Response

Condition 7 of the recommended PD sets requirements to ensure that the operation of facility does not give rise to nuisance at the facility or in the immediate area of the facility and addresses issues including dust, noise and odour. Condition 8.9.2 requires

the installation of a wind sock or wind direction indicator to assist in the assessment of any complaints relating to dust or odours. Schedule C.1 set noise emission limits of 55 DB(A) daytime and 45 DB(A) night time at Noise Sensitive Locations.

6. Health Concerns

A number of submissions raise health concerns. One submission refers to increased risk of birth defects associated with living near landfill sites and states that women living near landfill sites suffer increased cancer risks and can have children with low birth weights. The submission also quotes a report from the London School of Hygiene and Tropical Medicine which reviewed 46 studies of the human health effects of landfills stating “*landfill sites might represent real risks in certain circumstances*”. The report also states that the exact mechanism of the hazard remains unknown. One submission on behalf of Philipstown District and Residents Association refers to the Health Research Boards report on the *Health and Environmental Effects of Landfilling and Incineration of Waste* and states that the risk of increased numbers of cancer patients in close proximity to landfills, birth defects, respiratory illnesses, skin disorders and gastrointestinal illnesses as referred to in the report are issues of grave concern to residents near Whiteriver Landfill. The submission states that a full HEALTH CHECK should be conducted in a 1,5,10 and 20 mile radius of the Whiteriver Landfill to ensure no links to increased incidents of disease exist. The submission states that the EIS has not assessed exposure to and effects of living near a landfill.

Response

An August 2001 report by the Small Area Health Statistics Unit (SAHSU) in the UK presented results of epidemiological research commissioned by the Department of Health in collaboration with the National Assembly of Wales, other Departments and the Environment Agency. The research was to cover the largest possible range of landfill sites in Great Britain: it eventually included 9,565 landfills, all of which had been in operation for some or all of the period 1982-1997. The report considered the probabilities of birth defects, low birthweight, still births and certain cancers among the population living within two kilometres of a landfill site: it compared them with the probabilities in the population of those living more than two kilometres from a landfill. The report commented that it was not clear that landfills were causing these effects and that other explanations were possible – such as limitations with the data, or the possibility that the study did not completely take into account other relevant factors such as occupation or the use of medicines.

It is recognised that there are public concerns regarding the health impacts associated with waste facilities. The issue of baseline health data and adequate health information systems is a matter appropriate to the Department of Health and Children and the Health Boards.

7. Traffic

The issue of the unsuitable standard of the R169 for heavy vehicles going to and from the landfill is raised in a number of submissions. One submission states that when the landfill was originally being developed, Louth Co. Council had undertaken to widen

and resurface the road but the widening has never been carried out. Another submitter concurs that the road network adjacent to the landfill is not designed nor constructed to facilitate current or proposed levels of traffic using the landfill. This submission also states that safety at the junction with the Dunleer-Collon road is reduced by the number of heavy vehicles turning at this junction and that a 40mph speed limit should be applied in this area. Submissions also state that road cleaning facilities on site are not capable of maintaining roads in a proper state and that site infrastructure and the site entrance are inadequate for the level of traffic associated with the proposal.

Response

Traffic management and the provision of adequate roads accessing the facility is a matter for Louth County Council. Traffic awaiting access to the landfill is required to queue along the facility access road only, and not along the public road (Condition 3.5.2).

8. Landfill Gas Management

One submission raises concerns that there is no discussion of possible emissions of dioxins from the landfill gas flare. Concern is also expressed that low moisture infiltration post capping of cells will extend the period of landfill gas generation at the facility and that the prediction model presented in the application doesn't accurately reflect the period of landfill gas generation.

Response

The recommended PD requires the installation of an active collection and flaring system for the management of Landfill Gas (LFG) arising at the facility (Condition 3.15.3). Schedule C.5 of the recommended PD sets emission limit values for the combustion products from the flaring of the LFG which are in line with most recent accepted European and World Health Organisation standards. The flare is required to be of an enclosed type design and its final specification and location will have to be agreed with the Agency under Specified Engineering Works. The requirement to provide for the closure, restoration and aftercare of the facility (Condition 4 and Condition 12.2) with the establishment of an appropriate fund will include the control of LFG and its combustion product emissions for the duration of significant landfill gas generation at the facility.

9. High Court Order

One submission refers to the High Court order on the original development of the facility and states that any application to extend the facility to cater for waste from outside that catchment is illegal and disregards the original intention of the High Court ruling. The submission also states that an application to accept up to 100,000 tonnes per annum contradicts original proposals and that the High Court Ruling is again being broken in this regard. The submitter also queries whether the final contours originally proposed have been exceeded in parts of the facility. It is also stated that natural law should preclude the EPA from approving the extension as such an extension will lead to the creation of an excessive concentration of solid waste in one community that will adversely affect the health, safety and well being of the community.

Response

The EPA is not a party to the High Court Ruling referred to. The Waste Management Plan for the North Eastern Region identifies Whiteriver Landfill as having at least interim capacity for waste from County Louth. Any divergence from the High Court Ruling and the Aspinwall Report associated with the original development is essentially a matter for Louth County Council, the Monitoring Committee (which includes the local resident's group). In relation to the profile of the site, the final contour of the existing facility as agreed under the current waste licence is consistent with that proposed in the original Aspinwall report and the current waste licence. The recommended PD (Condition 8.10) requires annual topographical surveys of the landfill. I consider that compliance with the conditions set out in the recommended PD should ensure that the facility will not have a significant adverse impact on the environment or the local community.

10 Property and Land Devaluation

A submission states that land and sites in the area have virtually no value and that a number of sites in the area have been on the market for a long time. It also states that the presence of the landfill has hindered growth of the community. It is also asserted that the issue of property devaluation has not been addressed in the EIS.

Response

Property values are outside the remit of the Agency.

11. Local Community

One submission states that the landfill has been operating for 20 years and will be operating for a further 20 years and that the local community have received no additional infrastructure, recreational amenities or local area improvements from the Local Authority over that time and have received nothing to offset negative impacts of the development. The submission proposes the setting up of a non-profit making organisation made up of representatives of the local resident's group and the Local Authority to put together a development plan for the local area and derive funds from a levy emplaced on each tonne of waste accepted at the facility.

Response

Condition 2.4 of the recommended PD requires the licensee to establish and maintain a Communications Programme to inform and involve the local community and to ensure that members of the public can obtain information at the facility. The establishment of any fund for environmental or other community development projects in the area is a matter for the Local Resident's group and the licensee.

12. Non-compliance with existing licence

One submission states that, on the basis of EPA documentation indicating that the landfill operator has not properly managed the existing facility and that the landfill has degraded their quality of life and significantly affected the health, safety and well being of the public, the expansion of the facility should be rejected.

Response

The Agency has issued six notifications of non-compliance with conditions of the existing waste licence and the issues raised in these notifications are addressed in Section 5 of this report. Compliance with the conditions set out in the recommended

PD should ensure that the facility does not have a significant impact on the environment or the local community. The Agency will continue to enforce the conditions of the waste licence for the facility and in the event of non-compliance, the Agency will take appropriate enforcement action.

13. Waste Types

One submission requests a complete cessation of the disposal of all effluents, both liquid and solids (sewage and sewage sludge). Other submissions address the possibility that toxic ash from any incinerator developed locally may be disposed of at the facility in the future. It is also stated in a submission that a credible EIS would have addressed the issue of commercial and household wastes containing a portion of hazardous waste.

Response

The types and quantities of waste acceptable at the facility are restricted by Conditions 1.4 and 1.5 and Schedule A of the recommended PD. As outlined in Section 4 of this report, the applicant ceased acceptance of sewage sludge at the end of 2002 and the recommended PD does not provide for disposal of such waste at the facility. The recommended PD does provide for the disposal of 300 tpa of non-hazardous industrial sludges at the facility and Condition 5.9 requires the analysis of two samples per annum of all industrial sludges accepted at the facility. The applicant has applied to accept ash and cinders at the facility for disposal. However, the recommended PD provides only for the acceptance of non-hazardous waste. The facility is a facility for the disposal and recovery of non-hazardous wastes only and the PD requires that waste acceptance procedures in accordance with the Landfill Directive are put in place.

14 Infrastructure proposed does not constitute best practice

One submission contends that the specification for the lining and capping systems at the facility do not constitute best practice and that the liner system will be penetrated by leachate within 40 years. It also contends that there is inadequate information presented in the EIS to demonstrate that the underlying low permeability subsoils will provide protection against pollution and that high permeability areas within the subsoil may act as pathways for migration of polluting leachate.

Response

The specifications for the lining and capping systems as set out in Conditions 3.12 and 4.3 of the recommended PD are consistent with the principles of BAT (Best Available Techniques) and the requirements of the Landfill Directive. The recommended PD Condition 3.2.3) also specifies requirements for construction quality assurance validation of Specified Engineering works such as the installation of lining and capping systems. Requirements within the PD to control the level of leachate within cells and the leachate lagoon and on the disposal of leachate from the facility will also contribute to the minimisation of any environmental risk arising from the generation of leachate. See also response to Issue 2 and 4 above.

15. Site selection/location

One submission questions the siting of the landfill on top of a hill above an intake for a drinking water supply.

Response:

I consider that the design and mitigation measures set out in the application and the accompanying EIS in addition to the requirements of the recommended PD should ensure that the facility will not have a significant impact on the environment.

(9) Recommendation

I recommend the grant of a revised licence for the carrying on of waste activities at the facility as listed and described in Part I: Activities Licensed.

In coming to this recommendation, I consider that these activities would subject to the conditions set out in the recommended Proposed Decision, comply with the requirements of Section 40(4) of the Waste Management Act of 1996.

Signed: _____
Damien Masterson, Inspector
Environmental Management and Planning

Dated: _____
15th May 2003

Appendix 1

- 1.) Drawing No. 2 (2001/160/01/LCC Rev A) entitled *Location of Activity Map*
- 2) Drawing 2001-160-01-003 Rev A entitled *Site Plan*

Appendix 2

60-1 Inspector's Report – Inspector's report which accompanied
Proposed Decision for existing Waste Licence