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MEMO			
TO:	Board of Directors	FROM:	Michael Henry
CC:		DATE:	22 March 2000
SUBJECT : Peat Energy Division, Bord na Mona - Technical Committee Report on Objection to Proposed Decision - Reg. No. 49-1			

Application Details	
Applicant:	Peat Energy Division, Bord na Mona
Location of Activity:	Clonbullogue Ash Repository, Cloncreen, Clonbullogue, Co. Offaly
Reg. No.:	49-1
Licensed Waste Disposal activity in accordance with Third Schedule of the Waste Management Act 1996:	Class 1: Deposit on, in or under land (including landfill)
Application received:	12 June 1998
Article 14 (2)(b)(ii) issued:	16 July 1998; 04 September 1998
Article 14 (2)(b)(ii) received:	18 August 1998; 03 November 1998; 01 December 1998; 21 December 1998
Article 14 (2)(a) issued:	06 January 1999
Article 16 issued:	13 January 1999
Article 16 received:	12 April 1999
Proposed Decision issued on:	14 December 1999
Objection received:	10 January 2000
Inspector:	Mr. Eamonn Merriman

Consideration of the Objections

The Technical Committee (Michael Henry, Chairperson, Cormac Mac Gearailt and Regina Campbell committee members) has considered all of the issues raised and this report details the Committee's comments and recommendations following the examination of the objections on 13th and 14th March 2000.

Objections received

An objection to the proposed decision was received from Bord na Mona Energy Limited. Upon clarification and following legal advice by the Agency, this objection was treated as an objection from the applicant. The technical committee note that, while the application was being assessed for 'fit & proper person' and financial provisions', the applicant was regarded as a statutory corporation rather than a limited company.

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Oral hearing

The Board of the Agency has considered the objector's request for an oral hearing and has decided that an oral hearing will not be held.

Objection by Bord na Mona Energy Limited

Ground 1

The document does not take account of the fact that inert ash materials (fly and bottom ash) are the only wastes proposed for disposal at the monofill facility and that no biodegradable wastes will be disposed of on-site. It is considered that many of the conditions contained within the PD (see list in objection) are overly complex and excessive and are more applicable to refuse landfill sites rather than an inert facility such as that proposed at Clonbullogue. Therefore, the specific objections listed below should be removed from the final licence or appropriately amended.

Technical Committee's evaluation

With the exception of Condition 4.2, all of the Conditions specifically listed in this objection are dealt with in other objections below. The requirement for a site notice board under Condition 4.2 is considered necessary and will ensure that information concerning the facility will be available to all interested parties.

Recommendation

No change.

Ground 2

This objection is concerned with the requirement of Condition 2.9 to have a person on-site at all times during the operation of the facility. Condition 2.9 should be amended to read 'shall be present at all reasonable times during the operation of the facility'.

Technical Committee's evaluation

Condition 2.9 can be fulfilled by having the facility manager or a suitably qualified deputy present on-site at all times during the operation of the facility. Considering the nature and extent of works which will be undertaken at the site and to ensure that the conditions of the licence are being complied with, the requirement to have this person present at all times during the operation of the facility should remain.

Recommendation

No change.

Ground 3

It is proposed that, due to the remoteness of the site, all checking of waste loads will be done at source (power station) and not at the point of deposition (ash repository). The requirements for such detail as per Condition 3.12 (c,e,f) is unnecessary and this condition should, therefore, be amended.

Technical Committee's evaluation

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Condition 3.12 (c,e & f) requires the maintenance of a written record of each waste load arriving at the facility and specifically the following: a description of the waste, the name of the person checking the load and details on any wastes/loads which are removed or rejected. This condition does not state where the information should be generated but simply requires a record to be maintained. Clarification should be provided on this issue to the applicant by the Inspector.

Recommendation

No change.

Ground 4

Given the remoteness of the site unauthorised access to the site is unlikely outside of landfill operational hours. Access to the site will be restricted by the drainage ditch which is located to the Southern periphery of the site. The requirement for the erection of a perimeter fencing around the facility (Condition 4.3.2) is unnecessary and should be removed.

Technical Committee's evaluation

The Technical Committee notes the applicant's concerns in relation to the requirement for the erection of a perimeter fencing around the facility (including the peat borrow area). Condition 4.3.1 requires the applicant to submit a proposal for site security and the level and type of site security can be specified upon agreement of this proposal.

Recommendation

Amend Condition 4.3.2 as follows:

Prior to the date of commencement of the licensed activity, the licensee shall secure the boundaries of the facility. This security shall be designed so as to permit pedestrian access from the adjacent lane and rail access from Cloncreen Bog during hours of operation.

Ground 5

The requirement for construction of an office, maintenance of a working telephone and facsimile and the provision of toilet facilities at the landfill facility is unnecessary and Conditions 4.5, 4.6 and 4.7 should be amended.

Technical Committee's evaluation

The Technical Committee consider that an office should be provided at the facility for the processing and storing of documentation. However, taking into consideration the remoteness of the site, it is recommended that the requirement for a working telephone and facsimile should be removed. Condition 4.6 should be amended to ensure that the designated persons are contactable at all times during the operation of the facility and that telephone and facsimile contact numbers are provided in an agreed location. As the staff will have access to toilet facilities elsewhere, the technical committee consider Condition 4.7 should be removed.

Recommendation

No change to Condition 4.5

Amend Condition 4.6 as follows:

The licensee shall put in place measures which ensure that the facility manager or a suitably qualified and experienced deputy shall be contactable at all times during the operation of the

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facility. This shall include the provision and maintenance of a telephone and facsimile at a location agreed with the Agency.

Delete Conditions 4.7, 7.7.4 and Schedule G6.

Ground 6

This objection contends that the requirement to maintain 0.5m of undisturbed peat following peat harvesting in the Peat Borrow Area is not reasonable and Condition 4.10.3 should be amended or removed.

Technical Committee's evaluation

The main purpose of the residual peat layer in the peat borrow area is to facilitate restoration of the bogs following peat extraction. The Technical Committee consider that, in the absence of any information which demonstrate the levels of peat which promote an optimum level of restoration, this issue can be dealt with under the restoration and aftercare plans required under Condition 8.1.1.

Recommendation

Delete Condition 4.10.3

Ground 7

This objection regards the requirement to line the inert landfill unit with a composite liner as unnecessary and fails to accept the nature of the waste disposed of on site (i.e. bottom and fly ash). It contends that it is sufficient that the basal soil layer be restricted to that of an indigenous clay liner which will not be overlain by a HDPE liner. If in the event that sufficient clay is not available, then additional clay materials will be imported to achieve the necessary barrier layer.

Technical Committee's evaluation

This facility was classified as a non-hazardous landfill on the basis that elevated ecotoxicity values values (*Daphnia magna*: 17 Tu; Microtox: 151 to 172 Tu) were recorded in the eluate from the materials to be deposited in the landfill. This eluate could pose a threat to groundwater and/or surface water. The technical committee consider that the requirement to install a composite liner (basal soil layer overlain by an artificial sealed liner) should remain.

Recommendation

No change

Ground 8

This objection contends that continuous flow and level measurements are not required and Conditions 4.12.1 (f) and 4.12.1 (g) should be amended to reflect non-continuous monitoring.

Technical Committee's evaluation

Conditions 4.12.1 (f) and 4.12.1 (g) require a proposal for measurement of (i) both flow and level in the West East drain and (ii) discharge flow from the leachate storage/treatment system. The conditions do not require the applicant to install permanent continuous flow and level measurement structures. The type of monitoring can be agreed with the Agency upon submission of the above proposal. Clarification should be provided on this issue to the applicant by the Inspector.

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Recommendation

No change

Ground 9

Leachate generation is predicted to be minimal as the amount of ash deposited is controllable. Condition 4.12.3 is not applicable for this development.

Technical Committee's evaluation

Condition 4.12.3 states that leachate levels in the waste should not exceed a level of 1.0 m over the HDPE liner and this ensures that leachate heads are controlled and not allowed build up. The technical committee consider that this condition should remain.

Recommendation

No change

Ground 10

The wording of Condition 4.14.3 is unclear and should be clarified.

Technical Committee's evaluation

This condition will ensure that groundwater ingress to the landfill is controlled and the type of system to be installed must be agreed with the Agency. The inspector should clarify with the applicant what is required by this condition.

Recommendation

No change

Ground 11

Condition 4.16.3 is overly complex and fails to take into account the simplicity of the proposed development. All construction works which take place on-site will be supervised by Bord na Mona and adhere to building/construction regulations.

Technical Committee's evaluation

Condition 4.16.3 requires a construction quality assurance validation report to be drawn up following the completion of all specified engineering works. This will ensure that a detailed record of all completed specified engineering works is compiled and documented and will provide evidence that such work meets the specifications agreed with the Agency.

Recommendation

No change

Ground 12

Condition 5.5 is overly complex and fails to take into account the simplicity of the proposed development. The weight of the ash transported in the wagons can be calculated based on the volume of ash and the density of the ash fraction. Condition 5.5 should be amended to reflect this.

Technical Committee's evaluation

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It is necessary to have the weight (in tonnes) of all materials received at the facility recorded and the method of measurement should be agreed with the Agency. It is envisaged that such procedures would be similar to those laid out by the objector, which can be accommodated by the Condition as it stands.

Recommendation

No change

Ground 13

Conditions 5.6 and 5.9 are more applicable to general waste disposal activities and should be removed.

Technical Committee's evaluation

The technical committee consider that the requirement to check all wastes and remove those which are in contravention of the licence should remain whilst Condition 5.9 will ensure adequate control over scavenging.

Recommendation

No change

Ground 14

Conditions 6.2, 6.3, 6.4, 6.6, 6.7 fail to accept that no refuse will be disposed of at the site and therefore they should be amended.

Technical Committee's evaluation

Condition 6.2 of the proposed decision will ensure the free movement of all rail vehicles between the power station and the landfill facility and should remain. The primary purpose of Conditions 6.3 and 6.4 is to minimise environmental nuisances caused by loose litter (likely to arise primarily from staff and visitors) and also that all wastes other than those allowed under the terms of the licence will be removed and disposed of at an appropriate facility. As all of the wastes will be transported to the site by train and as dust nuisance is controlled by Condition 6.8 the technical committee recommend deletion of Condition 6.6. Condition 6.7 will ensure that odours from the activity (in the unlikely event of occurring) are adequately controlled while the technical committee consider that Condition 6.8 should remain.

Recommendation

Delete Condition 6.6.

Ground 15

This objection contends that in the unlikely event of leachate being discharged, a 1:100 dilution as required by Condition 7.7.1.1 is excessive as the landfill material is inert and any infiltration waters are unlikely to be contaminated.

Technical Committee's evaluation

The technical committee note the information supplied in the application which indicated that the eluate from the materials to be landfilled had elevated toxicity. In the event that discharges to the West-East drain will occur, a 1:100 dilution will ensure adequate protection of aquatic life in the receiving water.

Recommendation

No change

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Ground 16

All peat harvesting will be regulated as per IPC licensing requirements and Condition 4.13.1.3, Condition 7.7.3, Condition 7.9 and Schedule G5 should not differ from IPC requirements.

Technical Committee's evaluation

The technical committee consider that Conditions 4.13.1.3 and 7.7.3 together with the requirement to meet the emissions limit values in Schedule G5 will ensure that emissions from the peat borrow area will be adequately controlled. However, an additional interpretation clause under Condition 7.9.2 should be included for emissions from the peat borrow area.

Recommendation

Add new Condition 7.9.2.3 as follows:

Emissions from Peat Borrow Area

- (i) eight out of ten consecutive results, on the basis of 24hr flow proportional composite sampling, shall not exceed the emission limit value. No individual daily result similarly calculated shall exceed 1.5 times the emission limit value.
- (ii) 75% of grab samples for each monitored discharge shall not exceed the emission limit value; and no individual grab sample value shall exceed 3 times the emission limit value.

Ground 17

This objection relates to the establishment of a meteorological station at the site and it is proposed to use data generated from a nearby Bord na Mona climatological station.

Technical Committee's evaluation

The technical committee consider that the meteorological information required by Schedule F of the licence could be supplied from the nearby Bord na Mona works or from another source.

Recommendation

Amend Condition 9.3 as follows:

The licensee shall ensure that the meteorological data specified in Table F.4 of Schedule F shall be maintained on site.

Amend heading on Table F.4.1 Meteorological Monitoring as follows:

Table F.4.1 Meteorological Monitoring: Location to be agreed with the Agency

Amend Note 3 of Table F.1.2 as follows:

A wind rose, obtained from a meteorological station, for the relevant monitoring period shall be submitted with each set of results.

Ground 18

This objection requests that Condition 9.4.1 is amended on the basis that leachate generation is likely to be minimal and the amount of liquid contained within the deposited ash is controllable.

Technical Committee's evaluation

This condition requires a proposal to be submitted to the Agency on details of how the leachate levels within the active cell, leachate lagoon and any capped cells will be monitored. The technical committee consider that such a proposal is necessary so that the method of measurement/monitoring of leachate levels can be agreed with the Agency.

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No change

Ground 19

This objection contends that the toxicity testing specified in Condition 9.5.1 is excessively expensive and not required. The testing specified should be reduced and monitoring on a biennial basis is proposed.

Technical Committee's evaluation

The technical committee consider that, prior to any discharge from the leachate lagoon/treatment plant, testing should be carried out against four trophic levels. However, considering that regular discharges of leachate are unlikely, it is recommended that this testing is carried out on an annual basis.

Recommendation

Amend Condition 9.5.1 as follows:

Within one month prior to any discharge from the leachate lagoon/leachate treatment plant, the acute toxicity of the undiluted final treated leachate to four aquatic species from different trophic levels shall be determined by standardised and internationally accepted procedures and carried out by a competent laboratory. This testing shall be undertaken by a date agreed with the Agency. Thereafter the two most sensitive trophic levels shall be used for annual toxicity testing. A proposal for toxicity testing shall be submitted to the Agency for its agreement at least one month prior to the date of commencement of the licensed activity.

Amend the Toxicity monitoring frequency for surface water discharges in Table F.3.6 from 'Biannually' to 'Annually'.

Ground 20

This objection makes reference to Condition 9.5.2 but it also objects to the requirement for continuous flow and level measurement.

Technical Committee's evaluation

The issue of continuous flow and level measurements has been dealt with under Ground 8 above. With regard to Condition 9.5.2, the technical committee consider that continuous pH monitoring is not required and that weekly pH monitoring is adequate.

Recommendation

Delete Condition 9.5.2

Delete Point No. (iii) entitled 'On-line pH monitoring and recording' under Environmental Monitoring of Table D.2.

Amend the pH monitoring frequency for surface water discharges in Table F.3.6 from 'Continuous*' to 'Weekly*'

Ground 21

This objection contends that the requirement for soil mineral analysis under Condition 9.13.3 is premature and should only be carried out when dust migration off-site has been demonstrated.

Technical Committee's evaluation

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There are potential impacts to pasture soil mineral levels in the vicinity of this facility as a result of dust scatter from peat fly ash. Condition 9.13.3 requires a proposal for the establishment of baseline pasture soil levels and annual monitoring thereafter. The technical committee consider that such monitoring is necessary and the baseline/annual monitoring surveys should be agreed in advance with the Agency. The frequency of such monitoring may be reduced (Condition 9.8) if the facility is shown not to have a significant effect. Clarification should be provided on this issue by the inspector.

Recommendation

No change

Ground 22

This objection contends that Conditions 10.2 and 10.3 contradict Condition 4.9 and are more applicable to facilities where significant quantities of oil/diesel/chemicals are stored on-site.

Technical Committee's evaluation

Conditions 10.2 and 10.3 do not contradict Condition 4.9 and are necessary to ensure all spillages on-site are adequately controlled and dealt with. The inspector should provide clarification to the applicant that peat can indeed be used as an absorbent on-site.

Recommendation

No change

Ground 23

This objection contends that Condition 10.4 is not applicable as no waste will be burnt on-site.

Technical Committee's evaluation

There is a risk that some of the peat to be used at the facility may catch fire and such fires should be treated as emergencies and acted upon immediately. Therefore, the prohibition on burning of waste at the facility should remain.

Recommendation

No change

Ground 24

This objection states that the annual contribution (£9,402) is grossly excessive and should be recalculated.

Technical Committee's evaluation

The annual charge covers such areas as audits, site visits by inspectors, sampling costs and overall assessment of reports and monitoring data as submitted by the applicant. The technical committee discussed the charges to be paid to the Agency and consider that there is no basis for any amendment to the level of contribution as set out in the proposed decision. It should be noted that commonly the charges set for years subsequent to the year of grant of licence are reviewed after the first year and lowered where appropriate.

Recommendation

No change

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Ground 25

This objection contends that the monitoring requirements of Schedule F are greatly excessive and it objects specifically to F.1 Dust, F.3 Surface Water, Groundwater, Leachate and F.4 Meteorological Monitoring.

Technical Committee's evaluation

F.1 Dust

The issue of soil mineral analysis is dealt with under Ground 21 above. With regard to PM₁₀ monitoring and having regard to the dust size fraction analysis (65-90% of fly ash is <10 microns in diameter) submitted as part of the application, it is the view of the technical committee that the requirement for baseline and annual PM₁₀ monitoring should remain. The Technical Committee notes that Condition 9.8 allows for modifications to monitoring requirements, on the written instruction of the Agency.

F.3 Surface Water, Groundwater, Leachate

The technical committee consider that, with the exception of pH and toxicity which are dealt with in Ground's 19 and 20 above, the monitoring parameters and the frequency of monitoring specified in Table F.3 should not be amended. The Technical Committee notes that Condition 9.8 allows for modifications to monitoring requirements, on the written instruction of the Agency.

F.4 Meteorological Monitoring

This issue is dealt with under Ground 17 above.

Recommendation

No change

Ground 24

This objection relates to the emission limits specified in Schedule G (G.3, G.5 and G.6).

Technical Committee's evaluation

G.3 Leachate Storage/Leachate Treatment Plant Emission Limits to West-East Drain

In the event of discharges from the leachate lagoon, such discharges will have to comply with the emission limit values specified in Table G.3. Elevated pH (12.3 to 12.5) and toxicity levels (max.172 Tu for Microtox) were recorded in the information on the ash eluate provided as part of the application. It is the view of the technical committee that the limits specified should remain. It is possible that treatment of leachate will be required to achieve such limits, if discharge to surface waters is to occur.

G.5 Surface Water Emission from Peat Borrow Area

This issue is dealt with under Ground 16 above.

G.6 Treated Sewage Emissions

This issue is dealt with under Ground 5 above.

Recommendation

No change

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Signed:

Michael Henry
Technical Committee Chairperson