

**This Report has been cleared
for submission to the Board by
the Programme Manager F Clinton**
Signed: [Signature] Date: 20/2/10

**OFFICE OF
WASTE, LICENSING &
RESOURCE USE**



**REPORT OF THE TECHNICAL COMMITTEE ON
OBJECTIONS TO LICENCE CONDITIONS**

TO:	Directors
FROM:	Technical Committee - Environmental Licensing Programme
DATE:	10th February 2010
RE:	Objection to Proposed Decision for Monaghan County Council, Scotch Corner Landfill, Letterbane, Annyalla, Castleblaney, County Monahan, Waste Reg. Number: W0020-02

Application Details

Class(s) of activity:	3 rd Schedule: 1, 4, 5, 11, 12 & 13 4 th Schedule: 1, 2, 3, 4, 8, 11 & 13
Location of activity:	Scotch Corner Landfill, Letterbane, Annyalla, Castleblaney, County Monahan
Quantity of waste managed per annum:	39,500 tonnes
Licence review initiated:	18 th June 2009
Proposed Decision issued:	19 th October 2009
First party objection received:	13 th November 2009
Third Party Objection received	None
Submissions on Objections received:	None
Additional Information received:	None

Introduction

This report relates to a licence review of the Scotch Corner Landfill waste licence (W0020-01) granted to Monaghan County Council by the Environmental Protection Agency (EPA) on the 07/12/2001. The licence review was initiated by the EPA on the 18/06/2009, principally to give effect to the following:

- Articles 5 and 6 of Council Directive 1999/31/EC on the landfill of waste (the Landfill Directive) regarding the treatment of waste prior to landfill and diversion of biodegradable municipal waste from landfill;
- Article 49(5) of the Waste Management (Licensing) Regulations 2004 which states that waste that has not been subject to treatment shall not be accepted or disposed of in a landfill facility;
- The Office of Environmental Enforcement assessment of the landfill conditioning plan; and
- Best Available Techniques (BAT) obligation to reduce the overall environmental impact of landfill in particular the acceptance of biodegradable municipal waste at landfill.

A Third Party made a submission (dated 28/07/09) in relation to the waste licence review, which was considered by the Board at the Proposed Decision (PD) stage. The EPA issued a PD on the licence review (W0020-02) on 19th October 2009. Monaghan County Council lodged an objection to the PD on 13/11/09.

The licensee applied for a review of their licence (W0020-03) on the 18/09/2007, in order to: (i) revise the final landfill contours and levels; (ii) increase waste quantities for disposal; (iii) increase waste quantities for composting; and (iv) include the provision of an MBT plant. Licence review application W0020-03 is currently under consideration.

Consideration of the Objection

The Technical Committee, comprising of Stuart Huskisson (Chair) and Aoife Loughnane, has considered all of the issues raised in the Objection and this report details the Committee's comments and recommendations following the examination of the objection together with discussions with the Office of Environmental Enforcement (OEE) Inspector for the facility, who also provided comments on the points raised. The Technical Committee consulted the Office of Climate, Licensing & Resource Use (OCLR) Sectoral Expert Brian Meaney, in relation to the issues raised.

This report considers the first party objection, which consists of thirteen main points. The main issues raised in the objection are summarised below, however, the original documents should be referred to at all times for greater detail and expansion of particular points.

First Party Objection

The licensee has raised thirteen points of objection to the PD, a number of which are requests for clarification. There were no third party objections or submissions on objections.

A.1. Condition 1.5.d)

The licensee points out that Condition 1.5.d) is a duplication of Condition 1.5.b).

Technical Committee's Evaluation: Agreed.

Recommendation: Remove Condition 1.5.d)

~~1.5. d) No hazardous wastes or liquid wastes shall be disposed of at the facility.~~

A.2. Condition 3.14.2

The licensee objects to this condition, as it requires the installation of an interceptor drain around the perimeter of the site. The licensee states that an interceptor drain to phase 1 & 3 has already been installed and therefore this condition is unnecessary as its inclusion is superseded by the installation of the drain.

Technical Committee's Evaluation: The Technical Committee note that Condition 3.14.2, as included in the PD, has been complied with as an interceptor drain has already been installed. The Technical Committee recommend that this condition be amended to require that the interceptor drain be maintained, unless otherwise agreed by the Agency.

Recommendation: Amend Condition 3.14.2 as follows:

3.14.2 A leachate interceptor drain shall be ~~installed~~ **maintained** around the perimeter of the existing landfill area, **unless otherwise agreed by the Agency.**

A.3. Condition 4.1

The licensee states that the final landfill level of 114m, (as included in PD and the original licence (W0020-01)) was determined based on the assumption that the landfill site was originally at 97.8m OD (Malin Head). The licensee states that the true original level of the site was 124.8m OD (Malin Head). The licensee requests that the finished level should be adjusted accordingly and should not exceed 144.2m OD (Malin Head). The licensee also refers to a letter sent to the EPA on this matter, under the licence review application (W0020-03), which is currently under consideration.

Technical Committee's Evaluation: The Technical Committee note that the proposal to amend the final landfill finished level, from that included in the PD and original licence (W0020-01), is included in the scope of licence review application W0020-03, which is currently under consideration. The Technical Committee does not consider it appropriate to assess the proposed finished level under this review. The proposal to amend the finished height of the landfill will be considered fully based on the information provided under licence review W0020-03.

Recommendation: No Change

A.4. Condition 4.3.1.d)

The licensee requests clarification on the wording of Condition 4.3.1. d) considering the letter dated 20th June 2007 from the EPA.

Condition 4.3 specifies the requirements for final capping of the landfill. Condition 4.3.1. d) states:

4.3.1. d) compacted mineral layer of a minimum 0.6m thickness with a permeability of less than 1×10^{-9} m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection; and...

Technical Committee's Evaluation: The Technical Committee notes that the circular letter issued by the OEE (dated 20th June 2007) does not amend the detailed specification of the final capping system, compared to that required under Condition 4.3.

In relation to the Cell Design/Capping the circular letter states, "A gas barrier membrane should be incorporated into the barrier layer of the final capping specification and should also be laid on the interphases between filled cells and future cells. The application of the sub-soil/top soil layers to such interphases is not considered necessary by the Agency". The Technical Committee do not consider that this contradicts the requirements of Condition 4.3.1.d).

Recommendation: No Change

A.5. Condition 5.10.1

The licensee requests in respect to Conditions 5.2.2, 5.2.3 and 11.9 that the EPA consider amending Condition 3 of the licence to facilitate the possible provision of a Mechanical Biological Treatment (MBT) Plant. Monaghan County Council state that this would provide them with the scope to cater for the removal of recyclables and fines from the residual bin waste with the compostable fines undergoing in-vessel composting at the facility.

Technical Committee's Evaluation: The Technical Committee note that the proposal to install an MBT plant at the facility is included in the scope of licence review application W0020-03, which is currently under consideration. The Technical Committee do not consider it appropriate to assess the MBT proposal during this review, which has been initiated specifically to give effect to the provisions detailed in

the "Introduction" section of this report. The proposal to install an MBT plant will be considered fully based on the information provided under licence review W0020-03.

Recommendation: No Change

A.6. Condition 5.8.2.2

The Licensee requests that as the North-East region is introducing a 3-bin collection system that the EPA consider increasing the maximum quantity of biodegradable waste that may be composted at the facility from 2,000 tonnes to 5,000 tonnes per annum, to facilitate the waste collected via the 3 bin system, MBT organics and green waste accepted at the MRF.

Technical Committee's Evaluation: The Technical Committee note that the proposal to increase the maximum quantity of biodegradable waste that may be composted at the facility is included in the scope of the licence review application W0020-03, which is currently under consideration. The Technical Committee do not consider it appropriate to assess the proposal to increase the quantity of biodegradable waste under this review, which has been initiated specifically to give effect to the provisions detailed in the "Introduction" section of this report. The proposal to increase the maximum quantity of biodegradable waste will be fully considered based on the information provided under licence review W0020-03.

Recommendation: No Change.

A.7. Condition 6.6.1

The licensee refers to an EPA letter, dated 12th February 2002 (Ref. WL20-1/AK01CN) and received by Monaghan County Council, which approved the use of Monaghan Waste Water Treatment Plant for the disposal of tankered leachate from the facility. The licensee requests that Condition 6.6.1 be amended accordingly.

Technical Committee's Evaluation: The condition in the PD provides for alternative waste water treatment facilities to be approved for the treatment of tankered leachate from the licensed facility. This provision has been successfully utilised in the past to allow for the leachate to be treated at the Monaghan Waste Water Treatment plant, and permission may be sought by the licensee to use other waste water treatment facilities in the future in accordance with the provision of the condition as set out in the PD.

Recommendation: No change

A.8. Condition 10.2

The licensee requests that Condition 10.2 be amended to exclude those materials arriving at the materials recovery facility by private vehicles. They state the requirements of Condition 10.2 in relation to individuals depositing their recyclable materials are unworkable and impractical.

Technical Committee's Evaluation: Condition 10.2 requires the licensee to maintain written records for each load of waste arriving at the facility. The Technical Committee notes that Condition 10.2 of the original licence (W0020-01) excluded the requirement for written records in relation to waste loads arriving at the Materials Recovery Facility by private vehicle.

The Technical Committee do not consider it appropriate to impose the requirements of Condition 10.2 on the licensee in relation to private vehicles using the Civic Waste Facility (located adjacent to the Material Recovery Facility). (See Evaluation for A.9. below in relation to the distinction between the Materials Recovery Facility and Civic Waste Facility on the site of the facility).

Recommendation: Amend Condition 10.2 as follows:

- 10.2 The licensee shall maintain a written record for each load of waste arriving at the facility, **excluding those arriving at the Civic Waste Facility by private vehicle.** The licensee shall record the following:
- (i) the date and time;
 - (ii) the name of the carrier (including if appropriate, the waste carrier registration details);
 - (iii) the vehicle registration number;
 - (iv) the trailer, skip or other container unique identification number (where relevant);
 - (v) the name of the producer(s)/collector(s) of the waste as appropriate;
 - (vi) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
 - (vii) a description of the waste including the associated EWC/HWL codes;
 - (viii) the quantity of the waste, recorded in tonnes;
 - (ix) details of the treatment(s) to which the waste has been subjected;
 - (x) the classification and coding of the waste, including whether MSW or otherwise;
 - (xi) whether the waste is for disposal or recovery and if recovery for what purpose;
 - (xii) the name of the person checking the load; and
 - (xiii) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed.

A.9. Condition 10.2 and 5.10.1

The licensee requests clarification, stating that Condition 5.10.1 is ambiguous and appears to contradict Condition 10.2.

Technical Committee's Evaluation: The Technical Committee notes that Condition 5.10.1 of the PD is the same as that included in the original licence (W0020-01). This condition requires that the Material Recovery Facility be used only for source separated recyclable wastes, other than domestic waste from private vehicles. Unsorted domestic waste accepted at the facility is dealt with under other conditions of the PD (Condition 3.18.4 & 5.10.5 - Compaction and Condition 5.10.4 - Disposal).

The Technical Committee note that the Glossary definition for "Materials Recovery Facility" also includes "facilities available to members of the public for the deposition of waste". The OEE Inspector for the facility confirmed that the area used by members of the public to deposit recyclable materials, etc., is separate from the Materials Recovery Building.

To provide clarity and avoid contradictions, as outlined by the licensee, the Technical Committee recommend amendment of the PD to make a distinction between the Materials Recovery Facility and Civic Waste Facility at the site of the facility. Making this distinction has a knock-on effect on other conditions of the PD and the recommended amendments are outlined below.

It should be noted that Section A.8. of this report (above) amends Condition 10.2 to exclude the requirement for written records to be maintained in relation to each load of waste arriving at the Civic Waste Facility by private vehicle.

Recommendation: Amend Glossary entry for Materials Recovery Facility (MRF) and amend conditions to refer to a Civic Waste Facility as follows:

Materials Recovery Facility (MRF)	The recycling building and associated areas of hardstanding used for the collection, processing and storing of recyclable wastes at the facility.
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Amend Condition 1.6.2 to read as follows:

1.6.2 Materials Recovery Facility (MRF) and Civic Waste Facility

Waste shall only be accepted at the Materials Recovery Facility and **Civic Waste Facility** between the hours of 9:00 a.m. and 5:30 p.m. Monday to Sunday inclusive.

Amend Condition 2.1.2 to read as follows:

2.1.2 The Materials Recovery Facility (MRF) and **Civic Waste Facility** shall be supervised by an appropriately qualified and competent person at all times while waste may be accepted.

Amend Condition 2.2.1 to read as follows:

2.2.1 The licensee shall maintain written details of the management structure of the facility, including the Materials Recovery Facility and **Civic Waste Facility**. Any proposed replacement in the management structure shall be notified in writing to the Agency. Written details of the management structure shall include the following information;

- a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
- b) details of the responsibilities for each individual named under a) above; and
- c) details of the relevant education, training and experience held by each of the persons nominated under a) above.

Amend Condition 3.4.2 to read as follows:

3.4.2 The security pallsade fencing which surrounds the Materials Recovery Facility and **Civic Waste Facility** shall be maintained.

Amend Condition 3.5.2 to read as follows:

3.5.2 The facility entrance area, the access road to the Materials Recovery Facility and the Materials Recovery Facility itself and **Civic Waste Facility** shall be paved and maintained.

Amend Condition 3.11.2 to read as follows:

3.11.2 All tank and drum storage areas, including the waste oil/battery storage area at the **MRF Civic Waste Facility**, shall as a minimum be bunded, either locally or remotely, to a volume not less than the greater of the following:

- (a) 110% of the capacity of the largest tank or drum within the bunded area; or
- (b) 25% of the total volume of substance which could be stored within the bunded area.

Amend heading to Condition 3.18 to read as follows:

3.18 Materials Recovery Facility and Civic Waste Facility

3.18.1 The licensee shall maintain the Materials Recovery Facility infrastructure referred to in Attachment D of the application **received under licence Reg. No. W0020-01.**

3.18.2 The licensee shall provide and maintain the receptacles at the Materials Recovery Facility as shown in Drawing No. MRF110 "Materials Recovery Site Layout" of the application received under licence Reg. No. W0020-01, unless otherwise agreed by the Agency.

Amend Condition 3.18.3 to read as follows:

3.18.3 Surface water from hardstanding areas of the Materials Recovery Facility and Civic Waste Facility shall pass through a silt trap and a suitable oil interceptor prior to discharge to surface water bodies. The drainage system at the MRF shall include a valve and diversion line to allow for surface water discharges from here to be diverted to the lined leachate lagoon in the event of a spillage. The oil interceptor shall be in accordance with the draft European Standard prEn 858 (installations for the separation of light liquids) or replacement standard.

Amend the heading to Condition 5.10 to read as follows:

5.10 Materials Recovery Facility and Civic Waste Facility

Amend Condition 5.10.2 to read as follows:

5.10.2 All waste accepted at the ~~Materials Recovery Facility~~ Civic Waste Facility shall be either:

- a) into a skip;
- b) into the hopper of the compactor for disposal;
- c) into a receptacle for recovery,
- d) into a roofed storage area, or
- e) in the case where inspection is required, into a designated inspection area.

Amend Condition 5.10.3 to read as follows:

5.10.3 The licensee shall assign and clearly label each container at the ~~Materials Recovery Facility~~ Civic Waste Facility to indicate their contents.

Amend Condition 5.10.4 to read as follows:

5.10.4 All unsorted domestic waste accepted at the ~~Materials Recovery Facility~~ Civic Waste Facility for disposal shall be compacted within twelve hours. Such waste shall be removed for disposal within seventy two hours.

Amend Condition 5.10.7 to read as follows:

5.10.7 Unless otherwise agreed by the Agency, only the following wastes shall be accepted at the ~~Materials Recovery Facility~~ Civic Waste Facility; domestic waste, paper, newspaper, cardboard, glass, timber, rubble, aluminium and steel cans, plastic, textiles/clothes, footwear, white goods, scrap metal, electrical goods (other than printers), waste oil, used cooking oil, fluorescent tubes, batteries, household paint, household chemicals, tyres and green waste.

Amend Condition 7.5 to read as follows:

7.5 Prior to exiting the facility, all waste vehicles (excluding those using the MRF and Civic Waste Facility) shall use the wheelwash.

Amend Condition 10.8 to read as follows:

10.8 A written record shall be kept of the inspections, desludging, cleaning, maintenance and performance of the silt trap and oil interceptor referred to in Condition 3.18: Materials Recovery Facility and Civic Waste Facility of this licence.

Amend the second paragraph of the Introduction to read:

The licence also covers the operation of a Materials Recovery Facility (MRF) and Civic Waste Facility at the site. The Materials Recovery Facility allows for the storage and processing of source separated recyclable waste, other than domestic waste from private vehicles. The Civic Waste Facility accepts recyclable wastes from private vehicles, including paper, cardboard, glass, plastic, metal and some household hazardous wastes such as batteries and oil. The Civic Waste Facility accepts recyclable waste from members of the public (and WEEE from commercial retail premises) for recovery. ~~and also accepts unsorted household waste for disposal at the landfill.~~

A.10. Condition 11.9

The licensee refers to Condition 11.9 in conjunction with the objection to Condition 5.10.1 (Section A.5. above).

Technical Committee's Evaluation: Condition 11.9 of the PD requires the licensee to submit quarterly reports to Agency to demonstrate compliance with BMW diversion targets. This objection has already been discussed under objection A.5 above.

Recommendation: No Change.

A.11. Condition 12.3

The licensee states that they are awaiting clarification from the Irish Public Bodies (insurance agents) on Environmental Liabilities cover and state that they have no objection.

Technical Committee's Evaluation: The licensee's comment is noted.

Recommendation: No Change.

A.12. Schedule A.1: Waste Acceptance

The licensee refers to the original licence (W0020-01), which permitted the acceptance of 39,500 tonnes of waste per annum and the reduced waste total included in the PD of 33,900 tonnes per annum. The reduced tonnage has arisen due to the cessation of acceptance of Sewage Sludge and Non-Hazardous Industrial Sludges since the original licence (W0020-01) was issued and amendment of the total tonnage is included in the PD.

The licensee requests that the overall total of 39,500 be re-instated for several reasons, including the following: (i) to maintain competitiveness and economies of scale; (ii) to maintain capacity for local customers, with the advantage of minimising the carbon footprint; and (iii) as the site was deemed suitable to accept 39,500 tonnes of waste per annum in the past, the licensee sees no reason why this level cannot be retained.

Technical Committee's Evaluation: Based on the requested maximum waste acceptance limit of 39,500 tonnes/annum having previously been assessed and authorised under the original licence (W0020-01), the Technical Committee agree to the request to maintain this maximum limit.

The Technical Committee recommend increasing the maximum tonnage of household waste that may be accepted by 5,600 tonnes/annum, so that the maximum total tonnage that may be accepted at the facility is maintained at 39,500 tonnes/annum. The Technical Committee also recommend the inclusion of a footnote to allow for the limitations on individual non-hazardous waste types to be varied with the agreement of the Agency subject to the total limit for non-hazardous wastes remaining the same.

Recommendation: Amend Schedule A.1: Waste Acceptance to read as follows:

A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

WASTE TYPE	MAXIMUM TONNES PER ANNUM ^{Note 1}
Household	18,200
Commercial	5,700
Construction and Demolition Waste	2,800
Industrial Non-Hazardous	12,800
TOTAL	39,500

Note 1: The limitation on individual non-hazardous waste types may be varied with the agreement of the Agency subject to the total limit for non-hazardous waste remaining the same.

A.13. Condition Schedule D: Monitoring

The licensee refers to EPA documentation dated 21/03/07 (W0020-01/AP04AS) approving the amendment of the monitoring frequencies for specific surface water, groundwater and leachate monitoring points. The licensee requests that Table D5 should be replaced with the revised monitoring frequencies.

Technical Committee's Evaluation: As revised monitoring frequencies have been approved by the OEE, under the existing licence (W0020-01: letter W0020-01/AP04AS), the Technical Committee recommend the inclusion of the amended frequencies in the Final Decision. It is noted that Condition 8.2 of the licence allows for further amendment of monitoring frequency with the written agreement of the EPA.

Recommendation: Delete Table D.5.1 and replace with Table D.5.1(a) and Table D.5.1(b) as follows:

Table D.5.1(a) Groundwater - Parameters/Frequency

Parameter	Groundwater Monitoring Frequency (W)	Groundwater Level Monitoring Frequency (W, L, S, SL, SA, SL, SL, SL, SL)	Groundwater Quality Monitoring Frequency (W, L, S, SL, SA, SL, SL, SL, SL)	Groundwater Discharging to surface water Monitoring Frequency (G1 & G2)
Visual Inspection / Odour ^{Note 2}	Quarterly	Quarterly	Quarterly	Quarterly
Groundwater Level	Not Applicable	Quarterly	Quarterly	Not Applicable
Ammoniacal Nitrogen	Quarterly	Annually	Quarterly	Monthly
BOD	Not Applicable	Not Applicable	Not Applicable	Monthly
COD	Not Applicable	Not Applicable	Not Applicable	Monthly
Chloride	Quarterly	Annually	Quarterly	Monthly
Dissolved Oxygen	Quarterly	Annually	Quarterly	Monthly
Electrical Conductivity	Quarterly	Annually	Quarterly	Monthly

pH	Quarterly	Annually	Quarterly	Monthly
Total Suspended Solids	Not Applicable	Not Applicable	Not Applicable	Monthly
Temperature	Quarterly	Annually	Quarterly	Monthly
Boron	Annually	Annually	Annually	Annually
Cadmium	Annually	Annually	Annually	Annually
Calcium	Annually	Annually	Annually	Annually
Chromium (total)	Annually	Annually	Annually	Annually
Copper	Annually	Annually	Annually	Annually
Cyanide (total)	Annually	Annually	Annually	Annually
Fluoride	Annually	Annually	Annually	Annually
Iron	Annually	Annually	Annually	Annually
Lead	Annually	Annually	Annually	Annually
List I/II Organic Substances <small>Note 3</small>	Annually	Annually	Annually	Annually
Magnesium	Annually	Annually	Annually	Annually
Manganese	Annually	Annually	Annually	Annually
Mercury	Annually	Annually	Annually	Annually
Potassium	Annually	Annually	Annually	Annually
Sulphate	Annually	Annually	Annually	Annually
Sodium	Annually	Annually	Annually	Annually
Total Alkalinity	Annually	Annually	Annually	Annually
Orthophosphate	Annually	Annually	Annually	Annually
Total Oxidised Nitrogen	Quarterly	Annually	Quarterly	Quarterly
Total Organic Carbon	Quarterly	Annually	Quarterly	Quarterly
Residue on Evaporation	Annually	Annually	Annually	Annually
Zinc	Annually	Annually	Annually	Annually
Phenols	Annually	Annually	Annually	Annually
Total & Faecal Coliforms <small>Note 4</small>	Quarterly	Not Applicable	Not Applicable	Not Applicable

Table D.5.1(b) Surface Water and Leachate - Parameters/Frequency

	Surface Water Frequency (1000 L/2000 L)	Surface Water Frequency (1000 L/2000 L) BOD	Leachate Frequency (1000 L/2000 L)
Visual Inspection/ Odour <small>Note 2</small>	Weekly	Weekly	Quarterly
Leachate Level	Not Applicable	Not Applicable	Quarterly
Ammoniacal Nitrogen	Monthly	Quarterly	Annually
BOD	Monthly	Quarterly	Annually
COD	Monthly	Quarterly	Annually
Chloride	Monthly	Quarterly	Annually

Dissolved Oxygen	Monthly	Quarterly	Not Applicable
Electrical Conductivity	Monthly	Quarterly	Annually
pH	Monthly	Quarterly	Annually
Total Suspended Solids	Monthly	Quarterly	Not Applicable
Temperature	Monthly	Quarterly	Annually
Boron	Not Applicable	Not Applicable	Annually
Cadmium	Annually	Annually	Annually
Calcium	Annually	Annually	Annually
Chromium (total)	Annually	Annually	Annually
Copper	Annually	Annually	Annually
Cyanide (total)	Annually	Annually	Annually
Fluoride	S7 & S8 only Annually	Not Applicable	Annually
Iron	Annually	Annually	Annually
Lead	Annually	Annually	Annually
List I/II Organic Substances ^{Note 3}	S7 & S8 only Annually	Not Applicable	L6 only Annually
Mineral Oils	S9 only monthly	Not Applicable	Not Applicable
Magnesium	Annually	Annually	Annually
Manganese	Annually	Annually	Annually
Mercury	Annually	Annually	Annually
Potassium	Annually	Annually	Annually
Sulphate	Annually	Annually	Annually
Sodium	Annually	Annually	Annually
Total Alkalinity	Annually	Annually	Annually ^{Note 5}
Orthophosphate	Annually	Annually	Annually
Total Oxidised Nitrogen	Annually	Annually	Annually
Zinc	Annually	Annually	Annually
Biological Assessment	S7 only Annually ^{Note 6}	EPA155 & EPA180 only ^{Note 6}	Not Applicable
Atrazine	S7 & S8 only - Annually	Not Applicable	L6 only - Annually
Simazine	S7 & S8 only - Annually	Not Applicable	L6 only - Annually
Arsenic	S7 & S8 only - Annually	Not Applicable	L6 only - Annually
Hardness	S7 & S8 only - Annually	Not Applicable	L6 only - Annually
Nickel	S7 & S8 only - Annually	Not Applicable	L6 only - Annually

Notes in relation to Table D.5.(a) and D.5.(b):

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.

Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed.

Note 3: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 525 or equivalent), and pesticides (US Environmental Protection Agency method 608 or equivalent).

Note 4: In the case where groundwater is extracted for drinking water, if there is evidence of bacterial contamination, the analysis at up gradient and downgradient monitoring points should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.

Note 5: Only to be analysed in instances of on-site treatment of leachate.

Note 6: Appropriate biological methods (such as EPA Q-Rating System) to be used for the assessment of rivers and streams.

Overall Recommendation

It is recommended that the Board of the Agency grant a licence to the applicant

- (i) for the reasons outlined in the proposed decision and
- (ii) subject to the conditions and reasons for same in the Proposed Decision,
and
- (iii) subject to the amendments proposed in this report.

Signed

P.P. Aife Laghaine

Stuart Huskisson
for and on behalf of the Technical Committee