

APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence

Meenaboll Landfill Site, County Donegal

ATTACHMENTS TO SECTION G

Resource Use and Energy Efficiency

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION G RESOUCE USE AND ENERGY EFFICENCY

CONTENTS

Sub Section	Title	Page No
G.1	Raw Materials, Substances and Preparations.	G-1
G.2	Energy	G-1

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION G

Attachment G.1 Raw Materials, Substances, Preparations

A list of all raw product and ancillary materials, substances, fuels and energy, which will be utilised in or produced by the activity, are as follows:

Data and safety sheets for proposed insecticide and pesticide to be used on site are attached. These will not be stored on site.

Fuel and Energy Utilised	Annual Usage	Quantities Stored on Site
Water	1,000m ³	Not applicable
Electricity	21,200 kWh	Not applicable
Diesel	38,000 litres	Proposal for 10,000 litre tank on site
Hydraulic Oil	25 litres	Not applicable

Plant on Site	Usage	Estimated Annual Fuel Usage
Compactor	350 days @ 4 hours @ 14 litres hour	21,000
Digger	150 days @ 4 hours @ 20 litres/hour	12,000
Tractor and trailer	20 days @ 8 hours @ 5 litres/hour	800

Attachment G.2 Energy Efficiency

Refer to 6.17, Section 6, Volume one of the EIS with regards to energy production for the daily operation of the site to be generated on site by a diesel generator. The generator will also have a stand by capacity.

Energy audits will be undertaken at the facility as part of the Environmental Management System for the facility. Reference to the appropriate guidance material and reporting of recommendations of the audit will be included in the Annual Environmental Report for the facility to the Environmental Protection Agency.

DATA AND SAFETY SHEETS

*For inspection purposes only.
Consent of copyright owner required for any other use.*

BEFORE USING ANY PRODUCT READ THE LABEL CAREFULLY.

Issue No: LEAF83200

Date: July 1989

Sorex Limited, St. Michael's Industrial Estate, Widnes, Cheshire, WA8 8TJ.
Telephone: 051-420 7151. Telex: 627329 SOREX G. Fax: 051-495 1163.



BRODIFACOUMBAIT
BLOCKS

PRODUCT SAFETY DATA SHEET

PRODUCT BRODIFACOUMBAITBLOCKS CODE BROD83200

INTENDED USE FOR USE ONLY AS A RODENTICIDE

Approved under The Control of Pesticides Regulations 1986 for the control of rats and mice.

Approval number: MATF 04590

HAZARDOUS COMPONENTS

Common Name	Chemical Name (IUPAC)	CAS No:	% m/m
brodifacoum	3-3-(4-bromobiphenyl-4-yl)-1,2,3,4-tetrahydro-1-naphthyl-4-hydroxycoumarin	(56073-10-0)	0.002

COMPOSITION

A wax-bound bait containing 20ppm (0.002% m/m) brodifacoum, a purple warning dye, flavouring agent and stabilisers on a cereal base.

PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance : A briquette shaped wax-bound block, purple in colour with no significant odour.
Flash point : Not applicable.
Flammability : Non-flammable but combustible.
Solubility : Formulated product : insoluble in water.
Technical material : <10mg/litre in water (pH7)
Moderately soluble in organic solvents.

ENVIRONMENTAL HAZARDS

Brodifacoum bait blocks are hazardous to mammals, including domesticated animals, and birds if ingested.

Access to bait by non-target animals should be prevented.

For inspection purposes only.
Consent of copyright owner required for any other use.

HEALTH HAZARDS

Occupational Exposure Limit : Not yet established.

Toxicity Data

Acute oral LD₅₀ to rats is 13,500mg/kg (by extrapolation).

Health Hazards : Hazardous if ingested, but large quantities would need to be ingested to produce a toxic effect. Practically non-hazardous by skin contact.

Precautions :

AVOID ALL CONTACT BY MOUTH.

WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking, and after work.

DO NOT LAY BAIT where food, feed or water could become contaminated.

PREVENT ACCESS TO THE BAIT by children, domesticated animals, particularly dogs and birds.

DO NOT USE OUTDOORS.

REMOVE ALL REMAINS OF BAIT after treatment and burn.

SEARCH FOR AND BURN ALL RODENT BODIES. DO NOT PLACE in refuse bins or on rubbish tips.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place under lock and key.

EMPTY CONTAINER COMPLETELY and dispose of safely.

FIRST AID

Ingestion : Do not induce vomiting. Rinse out mouth. If swallowed, obtain medical advice immediately.

Skin contact : Wash off with soap and water.

Eye contact : Flush thoroughly with water.

Inhalation : Unlikely to occur.

GUIDE TO DOCTOR

Brodifacoum is an indirect anticoagulant. Vitamin K1 (phytylmenadione) is antidotal. Poisoning is unlikely unless large quantities have been ingested.

Symptoms : Clinical signs are unlikely to occur until 18h after ingestion. Thermal tetany may develop rapidly. Clinical signs result from uncorrected bleeding tendency and include: an increase in prothrombin time, bruising easily with occasional nose or gum bleeds, blood in stools or urine, excessive bleeding from minor cuts and abrasions, pale mouth and cold gums, anorexia and

general weakness. More severe cases of poisoning include haemorrhage (usually internal), shock and coma.

Medical Advice : In case of suspected poisoning, determine prothrombin times not less than eighteen hours after consumption. If elevated, administer vitamin K1 and continue until prothrombin times normalise. Continue determination of prothrombin time for three days after withdrawal of antidote and resume treatment if elevation occurs in that time.

For comprehensive medical advice on the treatment of poisoning, contact the nearest Poisons Information Centre or Sorex.

STORAGE AND TRANSPORT

This product is subject to the Food and Environment Protection Act, 1985, and The Control of Pesticides Regulations, 1986, made under it.

Store in original container under cool and dry conditions in a secure, well ventilated place, inaccessible to children and animals and away from foodstuffs, animal feedstuffs and products which may have an odour. Prevent attack by grain pests.

Transport U.K. : This product is non-hazardous under The Classification, Packaging and Labelling of Dangerous Substances Regulations, 1984.

EMERGENCY PROCEDURES

Fire : This product is non-flammable, but is combustible. In case of fire, extinguish with water spray, CO₂, foam, or dry powder. Avoid run-off into water courses.

Self-contained breathing apparatus should be worn by fire-fighting personnel.

Spillage : Any spillages should be cleared up immediately. Sweep up any spillages and dispose of safely (see below). Wash surfaces with detergent solution.

DISPOSAL

Product : Incinerate under controlled conditions, or arrange disposal through Local Authority (Environmental Health Department) or reputable waste disposal contractor.

Do not dispose of product in domestic refuse.

Pack : Do not re-use packs. Empty completely, puncture or crush them and dispose of safely.

Do not dispose of the pack in domestic refuse.

For inspection purposes only
Consent of copyright owner required for any other use.

BIO-INDUSTRIES GROUP 2002
CLEANING THE ENVIRONMENT NATURALLY

MATERIAL SAFETY DATA SHEET
(COMPLIES WITH C.O.S.H.H. REGULATIONS)

Date of Preparation 17/02/2001.

1. PRODUCT INFORMATION

1.1 Product Identifier: **BIOKILZ**
 1.2 Description: **Permethrin water based micro emulsion**
UN-NO. 1993 (from the concentrate)
 1.2.1 IUPAC Name: **3-phenoxybenzyl (1RS, 3RS; 1RS, 3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate**
 1.2.2 Product Type: **A synthetic pyrethroid insecticide containing 0.25% w/w concentrate, with cis/trans isomer ratio 25:75**
 1.3 Supplier: **Bio-Industries Ltd, Unit 66d Heather Road, Sandyford Industrial Estate, Dublin, Ireland.**
 1.4 Emergency Tel: **01-2941025**
 1.5 Application: **Insecticide for flying insects & crawling insects**
 Approval **HSE 7196 March 2001 UK**

2. COMPOSITION & INFORMATION ON INGREDIENTS

2.1 INGREDIENTS: **Permethrin (93% technical grade) (Xn, R22; N, R50, R53)**
Alkylaryl Sulphonate (Xi, R36/37)
Petroleum distillates (R10)
 2.2 Cas No. **00052645-53-1**

3. HAZARD IDENTIFICATION

TOXICITY:

Acute oral, rat: **not measurable**
 Acute dermal, rat: **not measurable**
 Inhalation: **not measurable**

May cause transient irritation of the eyes, skin and mucous membranes.
 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

4.1 Eye: Wash eyes with water for at least 15 minutes. Seek medical advice immediately.
 Symptoms: Transient eye irritation may occur.
 4.2 Skin: Remove any contaminated clothing and shoes (and launder clothes before reuse). Wash off skin immediately with soap and plenty of water.
 Seek medical advice if irritation occurs/persist.
 Symptoms: Transient eye irritation may occur.

4.3 Ingestion: Not applicable

4.4 Inhalation: Not applicable

5. FIRE FIGHTING MEASURES

5.1 Non Flammable Product; water based emulsion.

6.0 ACCIDENTAL RELEASE MEASURES : Not necessary

7. HANDLING AND STORAGE

7.1 Storage : Keep in original container-tightly closed. Do not expose to temperatures exceeding 60 degrees Centigrade. Store under cool, dry, well ventilated conditions. But below 0 degree Centigrade.

Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

7.2 Shelf life: More than 2 years at temperatures not exceeding 35 degrees centigrade (see individual concentrate container for expiry date)

7.3 Recommended packaging materials: See specific packaging of the bottles.

7.4 Precautions: No specific precautions.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilate area where product is handled.

Occupational Exposure Limit: Not applicable.

Personal protective equipment : rubber or PVC gloves should be worn. Masks not necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Milky emulsion in water
Solubility	:	n.a.
Density	:	0.998-1.000g/ml
Vapour pressure	:	n.a.
Flash point	:	less than 78 degrees Centigrade
Melting point	:	n.a.
Boiling point	:	less than 100 degrees centigrade/0.1mmHg (approx)
Auto-ignition temp.	:	Exothermic decomposition 270-330 degrees Centigrades

10. STABILITY & REACTIVITY

Hazardous reaction	:	Avoid strong oxidisers, acids and alkalies
Hazardous decomposition products	:	Combustion or thermal decomposition will evolve toxic and irritant vapours, including oxides of carbon and hydrogen chloride.
Heat stability	:	Do not expose to temperatures exceeding 60 degrees Centigrades. Preferential isomer crystallization may occur below 35 degrees Centigrades

11. TOXICOLOGICAL INFORMATION

From the BIKILZ	
Oral LD (Male & Female rat) :	less than 5000mg/kg
Dermal LD (male & Female rat):	less than 2000 mg/kg
Inhalation LC50 (rat) 4hr :	less than 3942 mg/m3
Irritancy Potential :	substance is not an eye or skin irritant in primary test
Possible Product Symptoms :	Transient skin irritation Transient eye irritation

ECOLOGICAL INFORMATION

Do not contaminate ponds, ditches, waterways or ground with the product or used containers. Do not allow to enter drains and sewers.

BIO KILZ is not persistent in the environment. It is destroyed by soil micro-organisms and does not leave residues in the environment or build up in food chains. Very toxic to fish and other aquatic life.

BIO KILZ LC50 (acetone, 96 hr) from BIO KILZ not measurable.
Rainbow Trout 0.019 mg/l
Bluegill Sunfish 0.032 mg/l

Daphnia (EC50, 48 hr) 0.002 mg/l

12. DISPOSAL CONSIDERATION

No specific instructions.

13. TRANSPORT INFORMATION

Not regulated

14. REGULATORY INFORMATION

Labelling: Special label for each country where the product is registered. Refer to any relevant national/international regulations for the protection of man and the environment.

15. OTHER INFORMATION

The information provided in this Safety Data Sheet is supplied in good faith and is accurate at the date of publication. The intention is to give sufficient information about the product and its properties to enable the user to formulate his own procedures for the safe use of the product in terms of health and safety of all concerned and the protection of the environment.

The information will be updated as when appropriate. It is not a specification of the product nor does it list the uses, for which the label on the container should be carefully studied.

In compiling the Safety Data Sheet due account has been taken of all proper and recommended applications of the product of which we are aware and any user must consult us before applying it to any novel or unusual use. The company accepts no responsibility unless the product is used as recommended.

For inspection purposes only. Consent of copyright owner required for any other use.



Product Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY /UNDERTAKING

PRODUCT NAME: 'KLERAT' WAX BLOCKS

Address/Phone No.: College Park House,
20 Nassau Street,
Dublin 2.

Tel. (01) 6795799

EMERGENCY PHONE No. (0044) 622 81 4777 anytime
ICI Ireland Ltd, Dublin (01) 6795799
Poisons Centre, Dublin (01) 379966

2. COMPOSITION/INFORMATION ON INGREDIENTS

Anticoagulant rodenticide bait consisting of paraffin wax blocks, each weighing 20g, containing 0.005% w/w brodifacoum.

MAFF No. : 04746
Product Code : 65484
EINECS No. : 259-980-5 : brodifacoum

HAZARDOUS INGREDIENT (S)	CAS No.	%(w/w)	Symbol	R Phrases
Brodifacoum	056073-10-0	0.005	T+	R26/27/28

3. HAZARDS IDENTIFICATION

Unlikely to cause harmful effects under normal conditions of handling and use.

4. FIRST-AID MEASURES

Symptoms of poisoning are typical of anticoagulants. In severe cases there may be bruising, haematomas of the joints, blood in the faeces and urine. An antidote, Vitamin K1 (Phytomenadione BP), should only be administered under the direction of a doctor who has access to a hospital laboratory. Doctors should refer to the ICI leaflet 'The treatment of Anticoagulant Poisoning', 1988.

INHALATION

Unlikely to be hazardous by inhalation unless heated. Remove patient from exposure, keep warm and at rest. Obtain medical attention as a precaution.

SKIN CONTACT

Unlikely to cause harmful effects under normal conditions of handling and use. Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water.

EYE CONTACT

Immediately irrigate with eye wash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.

INGESTION

ALL POISONED PATIENTS MUST BE TAKEN TO HOSPITAL IMMEDIATELY.

Refer to the ICI leaflet 'The treatment of Anticoagulant Rodenticide Poisoning', 1988.

Do not induce vomiting.

FURTHER MEDICAL TREATMENT

Gastric lavage may be effective when performed within 4 hours of ingestion.

Doctors should refer to the ICI leaflet 'The treatment of Anticoagulant Rodenticide Poisoning', 1988.

5. FIRE-FIGHTING MEASURES

Keep fire exposed containers cool by spraying with water.

EXTINGUISHING MEDIA

For small fires, use foam, carbon dioxide, dry powder or halon extinguishant. For large fires, use foam or waterlog: avoid use of water jet: Contain run-off water with, for example, temporary earth barriers.

FIRE FIGHTING PROTECTIVE EQUIPMENT

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Sweep up and shovel into waste drums or plastic bags. Protect against dust. Wash the spillage area with water.

Washings must be prevented from entering surface water drains.

Spillage or uncontrolled discharges into water courses must be alerted to the appropriate regulatory body.

7. HANDLING AND STORAGE

7.1 HANDLING

Read the label before use.

Avoid all contact by mouth. Wash hands and exposed skin after use. Avoid contact with eyes. When using do not eat, drink or smoke. Wash face and hands before eating, drinking and smoking. Prevent access to bait by domesticated animals.

7.2 STORAGE

Keep locked up. Keep in original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feedingsuffs.

Storage Life : Physically and chemically stable for at least 2 years when stored in original unopened sales container at ambient temperature.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

When using this product refer to the label for details.

Occupational Exposure Limits

HAZARD INGREDIENT (S)	LTEL 8hr TWA		STEL		Time mins
	ppm	mg/m	ppm	mg/m	
Brodifacoum		0.002			

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: waxy solid
Colour	: dark blue
Odour	: odourless
pH (Value)	: Not available
Boiling Point (Deg C)	: Not available
Melting Point (Deg C)	: >50
Flash Point (Deg C)	: does not flash
Auto Ignition Temperature (Deg C)	: Not available
Explosive Properties	: Not available
Oxidising Properties	: Not available
Vapour Pressure (mm/Hg)	: Not available
Density (g/m ³)	: 1.25
Solubility (water)	: Insoluble
Partition Coefficient	: Not available

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCT (S)

Combustion or thermal decomposition will evolve toxic and irritant vapours.

11. TOXICOLOGICAL INFORMATION

INHALATION

Unlikely route of exposure.

SKIN CONTACT

By consideration of the components of this mixture it is unlikely to be irritant and harmful in contact with skin.
Dermal Median Lethal Dose (>2000mg formulation/kg) (rabbit).

EYE CONTACT

Unlikely to cause eye irritation.

INGESTION

Low oral toxicity.

Oral Median Lethal Dose (approx. 10g/kg- by calculation) (rat).

12. ECOLOGICAL INFORMATION

TOXICITY

This product is toxic to fish, birds and wildlife.

13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Surplus material must be disposed of as detailed in the 'Guidelines for the avoidance, limitation and disposal of pesticide waste on the farm' GIFAP, 1987. Empty containers should not be washed and discharged. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not Classified as Hazardous for Transport.

15. REGULATORY INFORMATION

Not Classified as Hazardous to Users.

The safety phrases have been assigned by ICI Agrochemicals.

Users should ensure that they comply with any relevant local, state or national legislation.

EEC CLASSIFICATION : Under the Classification, Packaging and Labelling of Dangerous Substances Regs, 1984, this material is not dangerous for supply or conveyance.

SAFETY PHRASES : SO53: Do not reuse container, keep tightly closed in a safe place.

: SO54: See instructions for use supplied separately.

: DO1: Wash substances from skin or eyes immediately.

16. OTHER INFORMATION

This data sheet was prepared in accordance with Directive 91/155/EEC.

USE : A potent rodenticide, which can kill rodents with a single feed.

'Klerat' is a trademark of an ICI Group company.

Read the label before you buy: use pesticides safely.

GLOSSARY

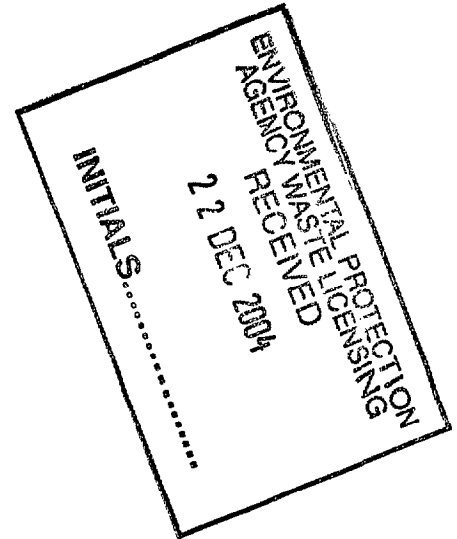
OES	: Occupational Exposure Standard (UK HSE EH40)
MEL	: Maximum Exposure Limit (UK HSE EH40)
ICI	: ICI aims to control exposure in its workplaces to this limit
TLV	: ICI aims to control exposure in its workplaces to the ACGIH Limit
TLV-C	: ICI aims to control exposure in its workplaces to the ACGIH Ceiling Limit
Sk	: Can be absorbed through skin
Sen	: Capable of causing respiratory sensation
MAK	: ICI aims to control exposure in its workplaces to the German Limit

For inspection purposes only
Consent of copyright owner required for any other use.



Agrochemicals

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.



APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence

Meenaboll Landfill Site, County Donegal

ATTACHMENTS TO SECTION H

Materials Handling

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION H WASTE ACCEPTANCE AND HANDLING

CONTENTS

Sub Section	Title	Page No
H.1	Existing Waste Types and Quantities	H-1
H.2	Waste Acceptance Procedures	H-1
H.3	Waste Handling	H-5

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION H

Attachment H.1 Waste Types and Quantities

Table H.1 (A) Quantities of waste in relation to each class of activity applied for

Waste Management Act 3rd Schedule (Disposal) Activities		Waste Management Act 4th Schedule (Recovery) Activities	
Class of Activity Applied For	Quantity (tpa)	Class of Activity Applied For	Quantity (tpa)
Class 1	24000	Class 1	
Class 2		Class 2	1,500 ^{Note 2}
Class 3		Class 3	350 ^{Note 3}
Class 4		Class 4	500 ^{Note 4}
Class 5	24,000	Class 5	
Class 6	5,700-13,200m ³ ^{Note 1}	Class 6	
Class 7		Class 7	
Class 8		Class 8	
Class 9		Class 9	
Class 10		Class 10	
Class 11		Class 11	
Class 12		Class 12	
Class 13	*5,700-13,200m ³ ^{Note 1}	Class 13	1500 ^{Note 5}

Notes

1. Leachate quantities vary over the operational period of the site between 13,200m³ and 5,700m³ per annum depending on the operational phase. Post closure leachate generation continues at an estimated 2,200m³/annum. Please refer to Section 6, Volume 1 of the EIS for more details.
2. Total volume of wastes to be accepted at Civic Amenity Site is 1500 tonnes/annum not including Domestic Waste. This figure is in addition to 24,000 tonnage figure for landfill site.
3. Based on estimate that approximately 23% of waste accepted for recycling will be metal.
4. As per waste licence 24-1.
5. Total volume of wastes to be accepted at Civic Amenity Site is 1500 tonnes/annum not including Domestic Waste. This figure is in addition to 24,000 tonnage figure for landfill site.

Third Schedule

Class 1: This activity is limited to the disposal of waste types specified in the licence.

Class 4: This activity is limited to the collection of surface water and the discharge from surface water settlement lagoons.

Class 5: This activity is limited to non-hazardous waste disposal in lined cells.

Class 6: This activity is limited to leachate treatment.

Class 13: This activity is limited to storage of waste prior to disposal.

Fourth Schedule

Class 2: This activity is limited to composting and /or recycling of materials.

Class 3: This activity is limited to recycling of materials.

Class 4: This activity is limited to recycling of materials or use of inorganic materials in restoration & aftercare and other on-site works.

Class 13: This activity is limited to activities at the Civic Waste Facility and the temporary storage of recyclables, reusable, and green waste, fridges and white goods pending their collection and storage of waste prior to disposal.

This activity is limited to the storage of soil, subsoil and construction and demolitions wastes at the facility prior to recovery /reuse at the facility.

Table H.1 (B) Annual Quantities and Nature of Waste

Year	Non-Hazardous Waste (tonnes per annum)	Hazardous Waste (tonnes per annum)	Total Annual Quantity of Waste (tonnes per annum)
2006(estimated 2 months input)	4,000	Not applicable	4,000
2007	24,000	Not applicable	24,000
2008	24,000	Not applicable	24,000
2009	24,000	Not applicable	24,000
2010	24,000	Not applicable	24,000
2011	24,000	Not applicable	24,000
2012	24,000	Not applicable	24,000
2013	24,000	Not applicable	24,000
2014	24,000	Not applicable	24,000
2015	24,000	Not applicable	24,000
2016	24,000	Not applicable	24,000
2017	24,000	Not applicable	24,000
2018	24,000	Not applicable	24,000
2019	24,000	Not applicable	24,000
2020	24,000	Not applicable	24,000
2021	24,000	Not applicable	24,000
2022	24,000	Not applicable	24,000
2023	24,000	Not applicable	24,000
2024	24,000	Not applicable	24,000
2025	24,000	Not applicable	24,000

Table H.1.(c) Waste Types and Quantities. Figures based on life expectancy of the proposed landfill site of approximately twenty years.

Table H.1.2 Hazardous Waste Types and Quantities.

Not Applicable. Landfill Site is for Non Hazardous Waste. Household Hazardous Waste will be accepted at Civic Waste Facility.

Attachment H.2 Waste Acceptance Procedures

Waste acceptance procedures will comply with the EPA’s Manual on Waste Acceptance (Current Addition) and Council Decision establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of the Directive 1999/31/EC.

Procedure:

Basic Characterisation

1. Basic characterisations will be carried out in accordance with Section 1 of Annex to "Council Decision establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of the Directive 1999/31/EC" to determine the acceptability of the waste.
2. Waste shall only be accepted if it fulfils the acceptance criteria for non hazardous waste as set out in section 2 of the Annex.
3. The sampling and testing methods used will be in accordance with those listed in section 3 of the Annex.

On Site

1. Wastes will only be accepted at the facility between licensed hours.
2. On arrival to site each vehicle shall stop at the reception where it shall be weighed and the following information recorded (except for domestic vehicles):
 - Date
 - Name of carrier
 - Vehicle registration
 - Name of the producer(s)/collector(s) of the waste as appropriate
 - Weight in tonnes
 - Description of waste including the associated EWC codes. Documentation regarding testing for Level 1: Basic characterisation should be obtained from the waste producer/contractor where required. (Level III, On site Verification e.g. Verification for Municipal waste- Municipal Waste Characterisation study should be carried out at least once every three years).
 - Type of container (skip, rear end loader etc)
 - Name of person checking load
 - Record of all waste inspections carried out in the waste inspection area.
 - Where loads of wastes are rejected, reasons for and the facility to where the waste was removed.
 - A written record of the estimated quantity of waste recorded in kilograms from domestic vehicles shall be recorded on a daily basis.
3. Waste inspections of the waste contents of incoming loads in the waste inspection area. If waste is scheduled for compliance testing then direct to waste inspection area. Undertake compliance testing as required (constitutes to monitor are dependent on Level 1: Basic characterisation). Provided the inspection has not revealed any unauthorised wastes the vehicle shall be allowed to proceed to the active tipping area. Complete the appropriate report form. (Level II, Compliance testing carried out at the landfill by the site operator).

4. Ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.
5. All wastes are to be visually inspected at the working face to ensure that they comply with the requirement of the licence. The waste shall be spread and compacted as soon as it becomes practical to do so and covered with daily cover at the end of each working day. (Level III, On site Verification)
6. Wastes deemed to be in contravention of Waste Licence and /or unsuitable for recovery or disposal will be removed for recovery or disposal at an appropriate alternative facility. If the vehicle, which deposited the waste, is still on site then driver will be informed that waste will have to be removed. If the vehicle, which deposited waste, is offsite then waste will be stored in the Waste Quarantine area until the haulier is contacted to return to the site to remove the waste. This waste may only be stored for a maximum period of forty-eight hours, unless otherwise agreed with the Agency.
7. Implement the Waste Rejection Procedure as follows:
 - Record the date of the occurrence,
 - Record the type of waste contained, reason for rejection
 - Record the name of the producer/contactor to which waste was returned or alternative facility to which the waste was removed.

Attachment H.3 Waste Handling

Refer to Section 7.0 of the EIS. Waste accepted on site will be deposited at the active face as directed by the site operative on duty. The waste will be spread and compacted by a compactor as soon as possible. The waste will be covered as soon as possible and no later than the end of the working day with daily cover material such as clayey/subsoil material.

Attachment H.3 (a) Waste Handling at the Landfill Facility

The Donegal Waste Management Plan will be reviewed in February 2005; however the following treatment of waste is being undertaken in the County:

Bring Bank Centers

There are currently 55 bring bank centres throughout the County and additional sites are being sourced. At these centres the council provides bring banks for beverage cans, brown/green/clear glass and textiles. Recycling services to include paper, card and plastics have been introduced to selected sites throughout the County.

Civic Amenity Sites

Donegal County Council has one Civic Amenity Site in operation in Carndonagh. This site offers recycling outlets for metals, electrical goods, wooden goods, batteries, oil, fridges, glass, cans and textiles.

Construction of a Civic Amenity Site at Stranorlar will commence in 2005. Other sites are currently being assessed in Letterkenny and Laghey. The Council are currently seeking sites in the Milford and Glenties Electoral area. These Civic Amenity facilities will deal with household hazardous waste. Currently the Chemcar is hired to deal with household hazardous waste in areas without a Civic Amenity facility.

Recycling facilities have also been included in the proposed landfill project at the Meenaboll site.

Composting

Donegal County Council has subsidised the provision of some 5,000 home composting bins throughout the County.

Further treatment of biodegradable waste streams will be reviewed as part of the Waste Management Plan review in February 2005.

Battery Recycling Bins

Battery recycling bins have recently been located at six Super Valu Supermarkets in Donegal. Domestic batteries can now be recycled in these outlets in Raphoe, Carndonagh, Letterkenny, Donegal Town, Dungloe and Ballybofey.

Kerb Side Collections

A number of kerb side collections commenced in 2004. It is expected that a greater coverage of kerbside collection from households will be undertaken in 2005 as part of the current review of waste collection permits by Donegal County Council.



APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence

Meenaboll Landfill Site, County Donegal

ATTACHMENTS TO SECTION I

Existing Environment Impacts of the Facility

ATTACHMENTS TO SECTION I

EXISTING ENVIRONMENT, IMPACTS AND MITIGATIONS

CONTENTS

Sub Section	Title	Page No
I.1	Air	I-1
I.2	Surface Water	I-1
I.3	Sewage Discharge	I-1
I.4	Geology & Hydrogeology	I-1
I.6	Noise	I-2
I.7	Ecology	I-2

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION I

Attachment I.1 Atmospheric Emissions

I.1 (a) Existing Environment

Refer to Section 9.0, Volume 1 of the EIS.

I.1 (b) Emissions

Refer to Section 9.0, Volume 1 of the EIS.

I.1 (c) Impact and Mitigation Measures

Refer to Section 9.0, Volume 1 of the EIS.

Attachment I.2 Surface Water

I.2 (a) Existing Environment

Refer to Section 10.0 and Section 12.0, Volume 1 of the EIS.

I.2 (b) Emissions

Refer to Section 10.0 and Section 12.0, Volume 1 of the EIS.

I.2 (c) Impact and Mitigation Measures

Refer to Section 10.0 and Section 12.0, Volume 1 of the EIS.

Monitoring results for surface water are included in Section 12 of the EIS (Table 12.3).

Attachment I.3 Sewer

Refer to Section 6.0 and 7.0, Volume 1 of the EIS for proposed treatment of leachate prior to discharge to Waste Water Treatment Plant.

Attachment I.4 Geology & Hydrogeology

I.4 (a) Existing Environment

Refer to Section 11.0, and 13.0, Volume 1 of the EIS.

I.4 (b) Emissions

Refer to Section 11.0, and 13.0, Volume 1 of the EIS.

I.4 (c) Impact and Mitigation Measures

Refer to Section 11.0, and 13.0, Volume 1 of the EIS and the following Drawings, which are included in Attachment "Drawings" of the Waste Licence Application.

- 5234.50/15 Ground Investigations
- 5234.50/16 Groundwater Contour Plan
- 5234.50/17 Geological cross-sections
- 5234.50/18 Surface Water Extraction Points
- 5234.50/19 Groundwater Extraction Points

Monitoring results for groundwater are in this attachment.

Attachment I.5 Groundwater and/or groundwater contamination

Not Applicable

Attachment I 6 Noise

I.6 (a) Existing Environment

Refer to Section 17, Volume 1 of the EIS

I.6 (b) Emissions

Refer to Section 17, Volume 1 of the EIS

I.6 (c) Impact and Mitigation Measures

Refer to Section 17, Volume 1 of the EIS

Monitoring results for noise are included in Section 17 of the EIS (Table 17.1).

Attachment I 7 Ecology

I.7 (a) Existing Environment

Refer to Sections 10 0 and 13.0, Volume 1 of the EIS.

I.7 (b) Emissions

Refer to Sections 10 0 and 13.0, Volume 1 of the EIS.

I.7 (c) Impact and Mitigation Measures

Refer to Sections 10.0 and 13.0, Volume 1 of the EIS and the following Drawing, which are included in Attachment "Drawings" of the Waste Licence Application.

5234.50/20 Existing Habitats

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Volatile Organic Compounds (EPA 624/8260)

Sample Identity - B01364-S0004 BH1 1505
 Client / Sample matrix - Donegal County Council/Water
 Units - µg/l
 Date Acquired - 26 Apr 2003 12:14
 Instrument Name - Instrumen

CAS No	Compound	Conc.	CAS No	Compound	Conc.
75-71-8	Dichlorodifluoromethane	<1	106-93-4	1,2-Dibromoethane	<1
74-87-3	Chloromethane	<1	127-18-4	Tetrachloroethene	<1
75-01-4	Vinyl Chloride	<1	630-20-6	1,1,1,2-Tetrachloroethane	<1
74-83-9	Bromomethane	<1	108-90-7	Chlorobenzene	<1
75-00-3	Chloroethane	<1	100-41-4	Ethylbenzene	<1
75-69-4	Trichlorofluoromethane	<1	108-38-3*	<i>p/m</i> -Xylene	<1
156-60-5	trans-1,2-Dichloroethene	<1	75-25-2	Bromoform	<1
75-09-2	Dichloromethane	<1	100-42-5	Styrene	<1
75-15-0	Carbon disulphide	<1	79-34-5	1,1,2,2-Tetrachloroethane	<1
75-35-4	1,1-Dichloroethene	<1	95-47-6	<i>o</i> -Xylene	<1
75-34-3	1,1-Dichloroethane	<1	96-18-4	1,2,3-Trichloropropane	<1
1634-04-4	tert-butyl methyl ether	<1	98-82-8	Isopropylbenzene	<1
156-59-2	cis-1,2-Dichloroethene	<1	108-86-1	Bromobenzene	<1
74-97-5	Bromochloromethane	<1	95-49-8	2-Chlorotoluene	<1
67-66-3	Chloroform	<1	103-65-1	Propylbenzene	<1
594-20-7	2,2-Dichloropropane	<1	106-43-4	4-Chlorotoluene	<1
107-06-2	1,2-Dichloroethane	<1	95-63-6	1,2,4-Trimethylbenzene	<1
71-55-6	1,1,1-Trichloroethane	<1	99-87-6	4-Isopropyltoluene	<1
563-58-6	1,1-Dichloropropene	<1	108-67-8	1,3,5-Trimethylbenzene	<1
71-43-2	Benzene	<1	541-73-1	1,3-Dichlorobenzene	<1
56-23-5	Carbontetrachloride	<1	106-46-7	1,4-Dichlorobenzene	<1
74-95-3	Dibromomethane	<1	135-98-8	sec-Butylbenzene	<1
78-87-5	1,2-Dichloropropane	<1	98-06-6	tert-Butylbenzene	<1
75-27-4	Bromodichloromethane	<1	95-50-1	1,2-Dichlorobenzene	<1
79-01-6	Trichloroethene	<1	104-51-8	<i>n</i> -Butylbenzene	<1
10061-01-5	cis-1,3-Dichloropropene	<1	96-12-8	1,2-Dibromo-3-chloropropane	<1
10061-02-6	trans-1,3-Dichloropropene	<1	120-82-1	1,2,4-Trichlorobenzene	<1
79-00-5	1,1,2-Trichloroethane	<1	91-20-3	Naphthalene	<1
108-88-3	Toluene	<1	87-61-6	1,2,3-Trichlorobenzene	<1
142-28-9	1,3-Dichloropropane	<1	87-68-3	Hexachlorobutadiene	<1
124-48-1	Dibromochloromethane	<1			

NB*also CAS No:106-42-3

**Water blank subtracted

Date Extracted:24/04/03

Checked By:.....*R. McNamee*.....

ALcontrol Geochem

Semivolatiles

Sample Identity - B01364-S0004 BH1 1505
 Client / Sample matrix - Donegal County Council/Water
 Units: - µg/l

CAS No	Compound	Conc.	CAS No	Compound	Conc. :-
108-95-2	Phenol	<1	207-98-9	Benzo(k)fluoranthrene	<1
95-57-8	2-Chlorophenol	<1	50-32-8	Benzo(a)pyrene	<1-
93-48-7	2-Methylphenol	<1	193-39-5	Indeno(1,2,3-cd)pyrene	<1
106-44-5	4-Methylphenol	<1	53-70-3	Dibenzo(a,h)anthracene	<1
88-75-5	2-Nitrophenol	<1	191-24-2	Benzo(ghi)perylene	<1
100-02-7	4-Nitrophenol	<1	91-58-7	2-Chloronaphthalene	<1
120-83-2	2,4-Dichlorophenol	<1	91-57-6	2-Methylnaphthalene	<1
105-67-9	2,4-Dimethylphenol	<1	86-74-8	Carbazole	<1
59-50-7	4-Chloro-3-methylphenol	<1	78-59-1	Isophercene	1
88-06-2	2,4,6-Trichlorophenol	<1	132-64-9	Dibenzofuran	<1
95-95-4	2,4,5-Trichlorophenol	<1	131-11-3	Dimethyl phthalate	<1
87-86-5	Pentachlorophenol	<1	84-66-2	Diethyl phthalate	<1
541-73-1	1,3-Dichlorobenzene	<1	84-74-2	Di-n-butylphthalate	<1
106-46-7	1,4-Dichlorobenzene	<1	117-84-0	Di-n-octylphthalate	<1
95-50-1	1,2-Dichlorobenzene	<1	117-81-7	Bis(2-ethylhexyl)phthalate	<1
120-82-1	1,2,4-Trichlorobenzene	<1	85-68-7	Butylbenzylphthalate	<1
98-95-3	Nitrobenzene	<1	106-47-8	4-Chloroaniline	<1
103-33-3	Azobenzene	<1	88-74-4	2-Nitroaniline	<1
118-74-1	Hexachlorobenzene	<1	99-09-2	3-Nitroaniline	<1
91-20-3	Naphthalene	<1	100-01-6	4-Nitroaniline	<1
208-96-8	Acenaphthylene	<1	121-14-2	2,4-Dinitrotoluene	<1
83-32-9	Acenaphthene	<1	606-20-2	2,6-Dinitrotoluene	<1
86-73-7	Fluorene	<1	111-44-4	Bis(2-chloroethyl)ether	<1
85-01-8	Phenanthrene	<1	101-53-3	4-Bromophenylphenylether	<1
120-12-7	Anthracene	<1	7005-72-3	4-Chlorophenylphenylether	<1
206-44-0	Fluoranthrene	<1	67-72-1	Hexachloroethane	<1
129-00-0	Pyrene	<1	87-68-3	Hexachlorobutadiene	<1
56-55-3	Benzo(a)anthracene	<1	77-47-4	Hexachlorocyclopentadiene	<1
218-01-9	Chrysene	<1	111-91-1	Bis(2-chloroethoxy)methane	<1
205-99-2	Benzo(b)fluoranthrene	<1	621-64-7	N-nitrosodi-n-propylamine	<1

Date Extracted: 25/11/07

Checked By: L. McNamee

Volatile Organic Compounds (EPA 624/8260)

Sample Identity - B01364-S0005 BH6 1506
 Client / Sample matrix - Donegal County Council/Water
 Units - µg/l
 Date Acquired - 26 Apr 2003 12:49
 Instrument Name - Instrumen

CAS No	Compound	Conc.	CAS No	Compound	Conc.
75-71-8	Dichlorodifluoromethane	<1	106-93-4	1,2-Dibromoethane	<1
74-87-3	Chloromethane	<1	127-18-4	Tetrachloroethene	<1
75-01-4	Vinyl Chloride	<1	630-20-6	1,1,1,2-Tetrachloroethane	<1
74-83-9	Bromomethane	<1	108-90-7	Chlorobenzene	<1
75-00-3	Chloroethane	<1	100-41-4	Ethylbenzene	<1
75-69-4	Trichlorofluoromethane	<1	108-38-3*	p/m-Xylene	<1
156-60-5	trans-1,2-Dichloroethene	<1	75-25-2	Bromoform	<1
75-09-2	Dichloromethane	<1	100-42-5	Styrene	<1
75-15-0	Carbon disulphide	<1	79-34-5	1,1,2,2-Tetrachloroethane	<1
75-35-4	1,1-Dichloroethene	<1	95-47-6	o-Xylene	<1
75-34-3	1,1-Dichloroethane	<1	96-18-4	1,2,3-Trichloropropane	<1
1634-04-4	tert-butyl methyl ether	<1	98-82-8	Isopropylbenzene	<1
156-59-2	cis-1,2-Dichloroethene	<1	108-86-1	Bromobenzene	<1
74-97-5	Bromochloromethane	<1	95-49-8	2-Chlorotoluene	<1
67-66-3	Chloroform	<1	103-65-1	Propylbenzene	<1
594-20-7	2,2-Dichloropropane	<1	106-43-4	4-Chlorotoluene	<1
107-06-2	1,2-Dichloroethane	<1	95-63-6	1,2,4-Trimethylbenzene	<1
71-55-6	1,1,1-Trichloroethane	<1	99-87-6	4-Isopropyltoluene	<1
563-58-6	1,1-Dichloropropene	<1	108-67-8	1,3,5-Trimethylbenzene	<1
71-43-2	Benzene	<1	541-73-1	1,3-Dichlorobenzene	<1
56-23-5	Carbontetrachloride	<1	106-46-7	1,4-Dichlorobenzene	<1
74-95-3	Dibromomethane	<1	135-98-8	sec-Butylbenzene	<1
78-87-5	1,2-Dichloropropane	<1	98-06-6	tert-Butylbenzene	<1
75-27-4	Bromodichloromethane	<1	95-50-1	1,2-Dichlorobenzene	<1
79-01-6	Trichloroethene	<1	104-51-8	n-Butylbenzene	<1
10061-01-5	cis-1,3-Dichloropropene	<1	96-12-8	1,2-Dibromo-3-chloropropane	<1
10061-02-6	trans-1,3-Dichloropropene	<1	120-82-1	1,2,4-Trichlorobenzene	<1
79-00-5	1,1,2-Trichloroethane	<1	91-20-3	Naphthalene	<1
108-88-3	Toluene	<1	87-61-6	1,2,3-Trichlorobenzene	<1
142-28-9	1,3-Dichloropropane	<1	87-68-3	Hexachlorobutadiene	<1
124-48-1	Dibromochloromethane	<1			

N.B*also CAS No:106-42-3

**Water blank subtracted

Date Extracted:24/04/03

Checked By:.....*L.M.C. [Signature]*.....

ALcontrol Geochem

Semivolatiles

Sample Identity - B01364-S0005 BH6 1506
 Client / Sample matrix - Donegal County Council/Water
 Units - µg/l

CAS No	Compound	Conc.	CAS No	Compound	Conc. -
108-95-2	Phenol	<1	207-08-9	Benzo(k)fluoranthrene	<1
95-57-8	2-Chlorophenol	<1	50-32-8	Benzo(a)pyrene	<1
95-48-7	2-Methylphenol	<1	193-39-5	Indeno(1,2,3-cd)pyrene	<1
106-44-5	4-Methylphenol	<1	53-70-3	Dibenzo(a,h)anthracene	<1
88-75-5	2-Nitrophenol	<1	191-24-2	Benzo(ghi)perylene	<1
100-02-7	4-Nitrophenol	<1	91-58-7	2-Chloronaphthalene	<1
120-83-2	2,4-Dichlorophenol	<1	91-57-6	2-Methylnaphthalene	<1
105-67-9	2,4-Dimethylphenol	<1	86-74-8	Carbazole	<1
59-50-7	4-Chloro-3-methylphenol	<1	78-59-1	Isophorone	<1
88-06-2	2,4,6-Trichlorophenol	<1	132-64-9	Dibenzofuran	<1
95-95-4	2,4,5-Trichlorophenol	<1	131-11-3	Dimethyl phthalate	<1
87-86-5	Pentachlorophenol	<1	84-66-2	Diethyl phthalate	<1
541-73-1	1,3-Dichlorobenzene	<1	84-74-2	Di-n-butylphthalate	<1
106-46-7	1,4-Dichlorobenzene	<1	117-84-0	Di-n-octylphthalate	<1
95-50-1	1,2-Dichlorobenzene	<1	117-81-7	Bis(2-ethylhexyl)phthalate	<1
120-82-1	1,2,4-Trichlorobenzene	<1	85-68-7	Butylbenzylphthalate	<1
98-95-3	Nitrobenzene	<1	106-47-8	4-Chloroaniline	<1
103-33-3	Azobenzene	<1	88-74-4	2-Nitroaniline	<1
118-74-1	Hexachlorobenzene	<1	99-09-2	3-Nitroaniline	<1
91-20-3	Naphthalene	<1	100-01-6	4-Nitroaniline	<1
208-96-8	Acenaphthylene	<1	121-14-2	2,4-Dinitrotoluene	<1
83-32-9	Acenaphthene	<1	606-20-2	2,6-Dinitrotoluene	<1
86-73-7	Fluorene	<1	111-44-4	Bis(2-chlorooctyl)ether	<1
85-01-8	Phenanthrene	<1	101-55-3	4-Bromophenylphenylether	<1
120-12-7	Anthracene	<1	7005-72-3	4-Chlorophenylphenylether	<1
206-44-0	Fluoranthrene	<1	67-72-1	Hexachlorocyclohexane	<1
129-00-0	Pyrene	<1	87-68-3	Hexachlorobutadiene	<1
56-55-3	Benzo(a)anthracene	<1	77-47-4	Hexachlorocyclopentadiene	<1
218-01-9	Chrysene	<1	111-91-1	Bis(2-chloroethoxy)methane	<1
205-99-2	Benzo(b)fluoranthrene	<1	621-64-7	N-nitrosodi-n-propylamine	<1

For inspection purposes only
 Consent of copyright owner required for any other use

Date Extracted : 25/11/07

Checked By: [Signature]

Volatile Organic Compounds (EPA 624/8260)

Sample Identity - B01364-S0006 BH7 1507

Client / Sample matrix - Donegal County Council/Water

Units - µg/l

Date Acquired - 26 Apr 2003 13:24

Instrument Name - Instrument

CAS No	Compound	Conc.	CAS No	Compound	Conc.
75-71-8	Dichlorodifluoromethane	<1	106-93-4	1,2-Dibromoethane	<1
74-87-3	Chloromethane	<1	127-18-4	Tetrachloroethene	<1
75-01-4	Vinyl Chloride	<1	630-20-6	1,1,1,2-Tetrachloroethane	<1
74-83-9	Bromomethane	<1	108-90-7	Chlorobenzene	<1
75-00-3	Chloroethane	<1	100-41-4	Ethylbenzene	<1
75-69-4	Trichlorofluoromethane	<1	108-38-3*	p/m-Xylene	<1
156-60-5	trans-1,2-Dichloroethene	<1	75-25-2	Bromoforn	<1
75-09-2	Dichloromethane	<1	100-42-5	Styrene	<1
75-15-0	Carbon disulfide	<1	79-34-5	1,1,2,2-Tetrachloroethane	<1
75-35-4	1,1-Dichloroethene	<1	95-47-6	o-Xylene	<1
75-34-3	1,1-Dichloroethane	<1	96-18-4	1,2,3-Trichloropropane	<1
1634-04-4	tert-butyl methyl ether	<1	98-82-8	Isopropylbenzene	<1
156-59-2	cis-1,2-Dichloroethene	<1	108-86-1	Bromobenzene	<1
74-97-5	Bromoethane	<1	95-49-8	2-Chlorotoluene	<1
67-66-3	Chloroform	<1	109-66-1	Propylbenzene	<1
594-20-7	2,2-Dichloropropane	<1	106-43-4	4-Chlorotoluene	<1
107-06-2	1,2-Dichloroethane	<1	95-63-6	1,2,4-Trimethylbenzene	<1
71-55-6	1,1,1-Trichloroethane	<1	99-87-6	4-Isopropyltoluene	<1
563-58-6	1,1-Dichloropropene	<1	108-67-8	1,3,5-Trimethylbenzene	<1
71-43-2	Benzene	<1	541-73-1	1,3-Dichlorobenzene	<1
56-23-5	Carbon tetrachloride	<1	106-46-7	1,4-Dichlorobenzene	<1
74-95-3	Dibromomethane	<1	135-98-8	sec-Butylbenzene	<1
78-87-5	1,2-Dichloropropane	<1	98-06-6	tert-Butylbenzene	<1
75-27-4	Bromodichloromethane	<1	95-50-1	1,2-Dichlorobenzene	<1
79-01-6	Trichloroethene	<1	104-51-8	n-Butylbenzene	<1
10061-01-5	cis-1,3-Dichloropropene	<1	96-12-8	1,2-Dibromo-3-chloropropane	<1
10061-02-6	trans-1,3-Dichloropropene	<1	120-82-1	1,2,4-Trichlorobenzene	<1
79-00-5	1,1,2-Trichloroethane	<1	91-20-3	Naphthalene	<1
108-88-3	Toluene	<1	87-61-6	1,2,3-Trichlorobenzene	<1
142-28-9	1,3-Dichloropropane	<1	87-68-3	Hexachlorobutadiene	<1
124-48-1	Dibromochloromethane	<1			

N.B*also CAS No:106-42-3

**Water blank subtracted

Date Extracted:24/04/03

Checked By: E. McNamee

ALcontrol Geochem

Semivolatiles

Sample Identity - B01364-S0006 BH7 1507
 Client / Sample matrix - Donegal County Council/Water
 Units - µg/l

CAS No	Compound	Conc.	CAS No	Compound	Conc. -
108-95-2	Phenol	<1	207-08-9	Benzo(k)fluoranthrene	<1
95-57-8	2-Chlorophenol	<1	50-32-8	Benzo(a)pyrene	<1
95-48-7	2-Methylphenol	<1	193-39-5	Indeno(1,2,3-cd)pyrene	<1
106-44-5	4-Methylphenol	<1	53-70-3	Dibenzo(a,h)anthracene	<1
88-75-5	2-Nitrophenol	<1	191-24-2	Benzo(ghi)perylene	<1
100-02-7	4-Nitrophenol	<1	91-58-7	2-Chloronaphthalene	<1
120-83-2	2,4-Dichlorophenol	<1	91-57-6	2-Methylnaphthalene	<1
105-67-9	2,4-Dimethylphenol	<1	86-74-8	Carbazole	<1
59-50-7	4-Chloro-3-methylphenol	<1	78-59-1	Isophorone	<1
88-06-2	2,4,6-Trichlorophenol	<1	132-64-9	Dibenzofuran	<1
95-95-4	2,4,5-Trichlorophenol	<1	131-11-3	Dimethyl phthalate	<1
87-86-5	Pentachlorophenol	<1	84-66-2	Diethyl phthalate	<1
541-73-1	1,3-Dichlorobenzene	<1	83-74-2	Di-n-butylphthalate	<1
106-46-7	1,4-Dichlorobenzene	<1	111-84-0	Di-n-octylphthalate	<1
95-50-1	1,2-Dichlorobenzene	<1	117-81-7	Bis(2-ethylhexyl)phthalate	<1
120-82-1	1,2,4-Trichlorobenzene	<1	85-68-7	Butylbenzylphthalate	<1
98-95-3	Nitrobenzene	<1	106-47-8	4-Chloroaniline	<1
103-33-3	Azobenzene	<1	88-74-4	2-Nitroaniline	<1
118-74-1	Hexachlorobenzene	<1	99-09-2	3-Nitroaniline	<1
91-20-3	Naphthalene	<1	100-01-6	4-Nitroaniline	<1
208-96-8	Acenaphthylene	<1	121-14-2	2,4-Dinitrotoluene	<1
83-32-9	Acenaphthene	<1	606-20-2	2,6-Dinitrotoluene	<1
86-73-7	Fluorene	<1	111-44-4	Bis(2-chloroethyl)ether	<1
85-01-8	Phenanthrene	<1	101-55-3	4-Bromophenylphenylether	<1
120-12-7	Anthracene	<1	7005-72-3	4-Chlorophenylphenylether	<1
206-44-0	Fluoranthrene	<1	67-72-1	Hexachloroethane	<1
129-00-0	Pyrene	<1	87-68-3	Hexachlorobutadiene	<1
56-55-3	Benzo(a)anthracene	<1	77-47-4	Hexachlorocyclopentadiene	<1
218-01-9	Chrysene	<1	111-91-1	Bis(2-chloroethoxy)methane	<1
205-99-2	Benzo(b)fluoranthrene	<1	621-54-7	N-nitrosodi-n-propylamine	<1

Date Extracted: 23/1/2005

Checked By: L. J. C. O'Connell

Volatile Organic Compounds (EPA 624/8260)

Sample Identity - B01364-S0007 BH9 1508
 Client / Sample matrix - Donegal County Council/Water
 Units - µg/l
 Date Acquired - 26 Apr 2003 13:59
 Instrument Name - Instrumen

CAS No	Compound	Conc.	CAS No	Compound	Conc.
75-71-8	Dichlorodifluoromethane	<1	106-93-4	1,2-Dibromoethane	<1
74-87-3	Chloromethane	<1	127-18-4	Tetrachloroethene	<1
75-01-4	Vinyl Chloride	<1	630-20-6	1,1,1,2-Tetrachloroethane	<1
74-83-9	Bromomethane	<1	108-90-7	Chlorobenzene	<1
75-00-3	Chloroethane	<1	100-41-4	Ethylbenzene	<1
75-69-4	Trichlorofluoromethane	<1	108-38-3*	p/m-Xylene	<1
156-60-5	trans-1,2-Dichloroethene	<1	75-25-2	Bromoform	<1
75-09-2	Dichloromethane	<1	100-42-5	Styrene	<1
75-15-0	Carbon disulphide	<1	79-34-5	1,1,2,2-Tetrachloroethane	<1
75-35-4	1,1-Dichloroethene	<1	95-47-6	o-Xylene	<1
75-34-3	1,1-Dichloroethane	<1	96-18-4	1,2,3-Trichloropropane	<1
1634-04-4	tert-butyl methyl ether	<1	98-82-8	Isopropylbenzene	<1
156-59-2	cis-1,2-Dichloroethene	<1	108-86-1	Bromobenzene	<1
74-97-5	Bromochloromethane	<1	95-49-8	2-Chlorotoluene	<1
67-66-3	Chloroform	<1	105-65-1	Propylbenzene	<1
594-20-7	2,2-Dichloropropane	<1	106-43-4	4-Chlorotoluene	<1
107-06-2	1,2-Dichloroethane	<1	95-63-6	1,2,4-Trimethylbenzene	<1
71-55-6	1,1,1-Trichloroethane	<1	99-87-6	4-Isopropyltoluene	<1
563-53-6	1,1-Dichloropropene	<1	108-67-8	1,3,5-Trimethylbenzene	<1
71-43-2	Benzene	<1	541-73-1	1,3-Dichlorobenzene	<1
56-23-5	Carbon tetrachloride	<1	106-46-7	1,4-Dichlorobenzene	<1
74-95-3	Dibromomethane	<1	135-98-8	sec-Butylbenzene	<1
78-87-5	1,2-Dichloropropane	<1	98-06-6	tert-Butylbenzene	<1
75-27-4	Bromodichloromethane	<1	95-50-1	1,2-Dichlorobenzene	<1
79-01-6	Trichloroethene	<1	104-51-8	n-Butylbenzene	<1
10061-01-5	cis-1,3-Dichloropropene	<1	96-12-8	1,2-Dibromo-3-chloropropane	<1
10061-02-6	trans-1,3-Dichloropropene	<1	120-82-1	1,2,4-Trichlorobenzene	<1
79-00-5	1,1,2-Trichloroethane	<1	91-20-3	Naphthalene	<1
108-88-3	Toluene	<1	87-61-6	1,2,3-Trichlorobenzene	<1
142-28-9	1,3-Dichloropropane	<1	87-68-3	Hexachlorobutadiene	<1
124-48-1	Dibromochloromethane	<1			

N.B*also CAS.No:106-42-3

**Water blank subtracted

Date Extracted:24/04/03

Checked By: *L.Mc Namara*

ALcontrol Geochem

Semivolatiles

Sample Identity - B01364-S0007 BH9 1508
 Client / Sample matrix - Donegal County Council/Water
 Units, - µg/l

CAS No	Compound	Conc.	CAS No	Compound	Conc. -
108-95-2	Phenol	<1	207-08-9	Benzo(k)fluoranthrene	<1
95-57-8	2-Chlorophenol	<1	50-32-8	Benzo(a)pyrene	<1-
95-48-7	2-Methylphenol	<1	193-39-5	Indeno(1,2,3-cd)pyrene	<1
106-44-5	4-Methylphenol	<1	53-70-3	Dibenzo(a,h)anthracene	<1
83-75-5	2-Nitrophenol	<1	191-24-2	Benzo(ghi)perylene	<1
100-02-7	4-Nitrophenol	<1	91-58-7	2-Chloronaphthalene	<1
120-83-2	2,4-Dichlorophenol	<1	91-57-6	2-Methylnaphthalene	<1
105-67-9	2,4-Dimethylphenol	<1	86-74-8	Carbazole	<1
59-50-7	4-Chloro-3-methylphenol	<1	78-59-1	Isophorone	<1
88-06-2	2,4,6-Trichlorophenol	<1	132-64-9	Dibenzofuran	<1
95-95-4	2,4,5-Trichlorophenol	<1	131-11-3	Dimethyl phthalate	<1
87-86-5	Pentachlorophenol	<1	84-66-2	Diethyl phthalate	<1
541-73-1	1,3-Dichlorobenzene	<1	84-74-2	Di-n-butylphthalate	<1
106-46-7	1,4-Dichlorobenzene	<1	17-84-0	Di-n-octylphthalate	<1
95-50-1	1,2-Dichlorobenzene	<1	17-81-7	Bis(2-ethylhexyl)phthalate	<1
120-82-1	1,2,4-Trichlorobenzene	<1	85-68-7	Butylbenzylphthalate	<1
98-95-3	Nitrobenzene	<1	106-47-8	4-Chloroaniline	<1
103-33-3	Azobenzene	<1	88-74-4	2-Nitroaniline	<1
118-74-1	Hexachlorobenzene	<1	99-09-2	3-Nitroaniline	<1
91-20-3	Naphthalene	<1	100-01-6	4-Nitroaniline	<1
208-96-8	Acenaphthylene	<1	121-14-2	2,4-Dinitrotoluene	<1
83-32-9	Acenaphthene	<1	606-20-2	2,6-Dinitrotoluene	<1
86-73-7	Fluorene	<1	111-44-4	Bis(2-chloroethyl)ether	<1
85-01-8	Phenanthrene	<1	101-55-3	4-Bromophenylphenylether	<1
120-12-7	Anthracene	<1	7005-72-3	4-Chlorophenylphenylether	<1
206-44-0	Fluoranthrene	<1	67-72-1	Hexachloroethane	<1
129-00-0	Pyrene	<1	87-68-3	Hexachlorobutadiene	<1
56-55-3	Benzo(a)anthracene	<1	77-47-4	Hexchlorocyclopentadiene	<1
218-01-9	Chrysene	<1	111-91-1	Bis(2-chloroethoxy)methane	<1
205-99-2	Benzo(h)fluoranthrene	<1	621-64-7	N-nitrosodi-n-propylamine	<1

Date Extracted : 21/4/01

Checked By: [Signature]

ALcontrol Laboratories Ireland

Table Of Results

Interim
 Validated

Ref Number: 03-B01281
Sample Type: WATER
 Location: Donegal County Council (Letterkenny)
 Client Contact: Don Smith
 Client Ref: ~~BALDWINAGARRIGK~~ *MORRISON*

Date of Receipt: 15/04/2003
 (of 10 test samples)

ALcontrol Reference	Detection Method	CV AA	FAHE R100	FAHE R100	EMPERCE	HPLC	HPLC AA	HPLC AA	ICP	ICP	ICP	ICP	ICP USN	ICP USN	ICP USN
	Method	<0.05ug/l	<0.2mg/l	<0.2mg/l	<5mg/l	<0.01mg/l	<5ug/l	<5ug/l	<0.05mg/l	<0.05mg/l	<0.05mg/l	<0.05mg/l	<0.4ug/l	<1ug/l	<5ug/l
	UKAS Accredited														
	Other ID														
Sample Identity															
03-B01281-S0006	1371 BH1	0.05	5.2	13.6	265	<0.01	<5	0.08	0.02	31.73	9.40	<0.05	<0.4	<1	<5
03-B01281-S0007	1372 BH5	<0.05	9.5	14.8	231	<0.01	<5	0.12	<0.05	40.55	8.75	<0.05	<0.4	<1	<5
03-B01281-S0008	1373 BH6	<0.05	3.0	19.0	211	0.55	<5	0.05	<0.05	33.92	7.78	0.07	0.7	<1	<5
03-B01281-S0009	1374 BH7	<0.05	1.0	13.8	129	<0.01	<5	<0.05	<0.05	15.87	3.53	0.07	<0.4	<1	<5
03-B01281-S0010	1375 BH3	<0.05	1.8	11.6	97	<0.01	<5	<0.05	<0.05	11.89	3.02	0.06	<0.4	<1	<5
03-B01281-S0011	1376 BH9	<0.05	3.4	27.5	191	<0.01	<5	0.19	<0.05	27.75	5.90	<0.05	<0.4	<1	<5
03-B01281-S0012	1377 BH10	<0.05	3.6	11.0	259	0.04	<5	0.06	<0.05	43.05	7.29	<0.05	<0.4	<1	<5
03-B01281-S0013	1378 BH13	<0.05	2.8	11.2	179	0.02	<5	0.07	<0.05	32.82	6.59	0.10	<0.4	<1	<5

Consent for inspection purposes only. Required for any use.

Notes: METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL.
 NDP = NO DETERMINATION POSSIBLE
 MFP = NO FINES PRESENT

Checked By: Dylan Harbin
 * SUB-CONTRACTED TO OTHER LABORATORY / ** SUB-CONTRACTED TO ALCONTROL CHESTER

ALcontrol Laboratories Ireland

Table Of Results

Interim
 Validated

ALcontrol Reference	Sample Identity	Detection Method Method Detection Limit UKAS Accredited	ICP USN <1ug/l	ICP USN <5ug/l	ICP USN <10ug/l	ICP USN <10ug/l	ICP USN <5ug/l	IR <2mg/l	KONE <1mg/l	KONE <0.5mg/l	KONE <3mg/l	KONE <0.1mg/l	METER <0.1mg/l	METER /rept. Units	METER SFCTRO	
03-B01281-50006	1371 BH1	UNKNOWN	7	<5	<10	<10	5051	9	1	<0.5	6	<0.3	0.330	5.3	6.97	<0.2
03-B01281-50007	1372 BH5	UNKNOWN	3	<5	<10	<10	9012	6	38	<0.5	<3	<0.3	0.358	5.9	6.85	<0.2
03-B01281-50008	1373 BH6	UNKNOWN	3	<5	<10	<10	4989	5	<1	<0.5	6	<0.3	0.321	6.4	7.47	<0.2
03-B01281-50009	1374 BH7	UNKNOWN	7	<5	<10	<10	424	4	<1	<0.5	<3	<0.3	0.184	5.9	6.69	0.3
03-B01281-50010	1375 BH8	UNKNOWN	1119	<5	<10	<10	59	21	<1	<0.5	45	<0.3	0.195	6.3	6.79	1.7
03-B01281-50011	1376 BH9	UNKNOWN	29	<5	<10	<10	15	8	<1	<0.5	11	<0.3	0.320	6.0	7.26	<0.2
03-B01281-50012	1377 BH10	UNKNOWN	13	<5	<10	<10	5310	7	17	<0.5	15	0.3	0.373	6.1	6.91	<0.2
03-B01281-50013	1378 BH11	UNKNOWN	9	<5	<10	<10	133	14	2	<0.5	7	<0.3	0.314	5.9	6.86	0.3

Ref Number: 03-B01281
 Client: Donegal County Council (Letterkenry)
 Date of Receipt: 15/04/2003
 (of 41 sample)

Sample Type: WATER
 Location:
 Client Contact: Don Smith
 Client Ref: BALLYNACARRICK

Notes: METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL.
 NFP - NO FIBRES PRESENT

Checked By: Dylan Healin
 * SUBCONTRACTED TO OTHER LABORATORY / ** SUBCONTRACTED TO ALCONTROL CHESTER

ALcontrol Laboratories Ireland Table Of Results

Interim
 Validated

Ref Number: 03-B01281

Sample Type: WATER

Client: Donegal County Council (Letterkenny)

Location:

Date of Receipt: 15/04/2003

Client Contact: Don Smith

(of first sample)

Client Ref: BAL-~~ANAGARRIGK~~ MORNABOLL

AI control Reference	Detection Method	Method Detection Limit UKAS Accredited	CV AA <0.05mg/l	FLAME PHOTO <0.2mg/l	GRAVIMETRIC <5mg/l	HPLC <0.01mg/l	Hydride AA <5ug/l	ICP <0.05mg/l	ICP <0.05mg/l	ICP <0.05mg/l	ICP <0.05mg/l	ICP USN <0.4ug/l	ICP USN <1ug/l	ICP USN <5ug/l
03-B01281-50005	1371 BH1	UNKNOWN	<0.05	5.2	265	<0.01	<5	0.08	0.82	31.73	9.40	<0.05	<0.4	<5
03-B01281-50007	1372 BH5	UNKNOWN	<0.05	4.5	231	<0.01	<5	0.12	<0.05	40.55	8.75	<0.05	<0.4	<5
03-B01281-50008	1373 BH6	UNKNOWN	<0.05	3.8	201	0.55	<5	0.05	<0.05	33.92	7.78	0.07	0.7	<5
03-B01281-50009	1374 BH7	UNKNOWN	<0.05	1.0	120	<0.01	<5	<0.05	<0.05	15.87	3.53	0.07	<0.4	<5
03-B01281-50010	1375 BH3	UNKNOWN	<0.05	1.8	97	<0.01	<5	<0.05	<0.05	11.89	3.02	0.06	<0.4	0
03-B01281-50011	1376 BH8	UNKNOWN	<0.05	3.4	192	<0.01	<5	0.19	<0.05	27.75	5.90	<0.05	<0.4	<5
03-B01281-50012	1377 BH10	UNKNOWN	<0.05	3.6	259	0.04	<5	0.02	<0.05	41.05	7.29	<0.05	<0.4	<5
03-B01281-50013	1378 BH13	UNKNOWN	<0.05	2.8	179	0.02	<5	0.07	<0.05	32.82	6.89	0.10	<0.4	<5

For inspection purposes only
Content of copyright owned required for any use

Notes: METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL. MDP = NO DETERMINATION POSSIBLE
MFP = NO FISHES PRESENT

Checked By: Dylan Hojar

* SUB-CONTRACTED TO OTHER LABORATORY / ** SUB-CONTRACTED TO AL-CONTROL CHESTER

Printed at 12:40 on 21/05/2003

ALcontrol Laboratories Ireland

Table Of Results

Interim
 Validated

Ref Number: 03-B01281
Sample Type: WATER
 Client: Donegal County Council (Letterkenny) Location
 Date of Receipt: 15/04/2003 Client Contact: Don Smith
 (of first sample) Client Ref: BALLYNACARRICK

ALcontrol Reference	Sample Identity	Other ID	SPECTRO Method Detection Limit UKAS Accredited	SPECTRO Method Detection Limit <0.05mg/L	TITRATION Method Detection Limit <1mg/L	Total Cyanide		Total Alkalinity as CaCO3	
						mg/L	mg/L	mg/L	mg/L
03-B01281-500A6	1371 BH1	UNKNOWN	<0.05	<0.05	✓	140			
03-B01281-500A7	1372 BH5	UNKNOWN	<0.05	<0.05		320			
03-B01281-500A8	1373 BH6	UNKNOWN	<0.05	<0.05		40			
03-B01281-500A9	1374 BH7	UNKNOWN	<0.05	<0.05		80			
03-B01281-500B0	1375 BH9	UNKNOWN	<0.05	<0.05		60			
03-B01281-500B1	1376 BH9	UNKNOWN	<0.05	<0.05		130			
03-B01281-500B2	1377 BH10	UNKNOWN	<0.05	<0.05		170			
03-B01281-500B3	1378 BH13	UNKNOWN	<0.05	<0.05		130			

Consent of copyright owner required for any other use.
 For inspection purposes only.

NOTES: METHOD DETECTION LIMITS ARE ±0.5 ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL. NOP = NO DETERMINATION POSSIBLE
 NFP = NO FIRES PRESENT

Checked By: Dylan Halpin

* SUBCONTRACTED TO OTHER LABORATORY *** SUBCONTRACTED TO ALCONTROL CHESTER

MEENABOOL PROPOSED LANDFILL BOREHOLE ANALYSIS OCT '04

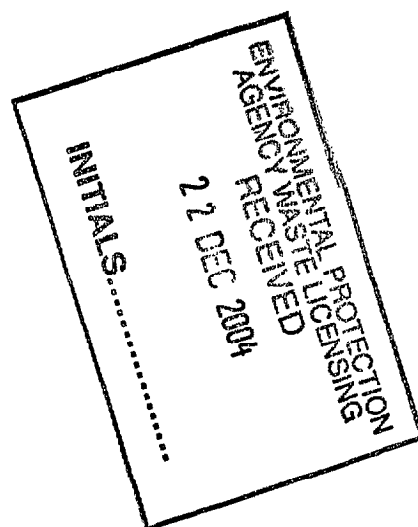
Sample Identity	Lab Ref	Date	pH	Conductivity	Temperature	Dissolved Oxygen	Chemical Oxygen Demand	Chloride	Ammonia NH ₃	Nitrite NO ₂	Nitrate NO ₃	Total Oxidised Nitrogen	Phosphate
						mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
BH1	4433	4/10/04	6.96	104.1	11.24	6.95	12	16	0.03	<0.03	0.09	0.026	0.095
BH5	4434	4/10/04	7.95	445	11.35	7.7	16	22	0.022	<0.03	<0.04	<0.01	0.04
BH6	4435	4/10/04	7.92	464	11.40	6.36	9	28	<0.01	<0.03	<0.04	<0.01	0.1
BH7	4436	4/10/04	6.98	160.8	11.62	3.07	1	26	0.057	<0.03	0.22	0.054	0.55
BH8	4437	4/10/04	6.41	250	11.36	5.30	69	22	0.54	<0.03	<0.04	<0.01	0.07
BH9	4438	4/10/04	6.80	282	11.84	5.60	20	30	<0.01	<0.03	0.05	0.014	0.81
BH10	4439	4/10/04	7.20	217	11.34	3.29	25	26	0.02	<0.03	0.20	0.06	0.11
BH13	4440	4/10/04	6.89	239	11.85	3.40	4	22	0.02	<0.03	<0.04	<0.01	0.13

Sample Identity	Lab Ref	Date	Dissolved Arsenic Low Level	Dissolved Mercury Low Level	Potassium	Sodium	Total Dissolved Solids	Dissolved Boron	Dissolved Calcium	Dissolved Magnesium	Dissolved Phosphorous	Dissolved Cadmium Low Level	Dissolved Chromium Low Level
			ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l
BH1	4433	4/10/04	<2	<0.05	4.2	6.8	60	0.07	7.72	0.85	0.16	1.9	31
BH5	4434	4/10/04	<2	<0.05	7.8	20.0	297	0.06	64.63	11.72	0.15	<0.4	2
BH6	4435	4/10/04	<2	<0.05	3.8	15.0	317	0.05	72.34	10.18	0.08	<0.4	18
BH7	4436	4/10/04	<2	<0.05	1.0	13.4	68	0.05	13.82	2.44	0.21	<0.4	<1
BH8	4437	4/10/04	<2	<0.05	3.0	13.2	184	<0.05	29.15	2.93	0.16	<0.4	2
BH9	4438	4/10/04	<2	<0.05	1.6	17.5	191	0.05	35.54	3.74	0.10	<0.4	8
BH10	4439	4/10/04	<2	<0.05	1.2	11.4	295	0.05	23.11	3.93	0.06	<0.4	<1
BH13	4440	4/10/04	<2	<0.05	1.4	11.2	<35	<0.05	27.67	4.77	0.23	<0.4	<1

Depth	m	Total Cyanide	mg/l	Sulphate	mg/l	Fluoride	mg/l	Total Organic Carbon	mg/l	Dissolved Zinc Low Level	ug/l	Dissolved Nickel Low Level	ug/l
	0.5	<0.05	9	0.2	3	2231	<10						
	0.35	<0.05	6	0.4	5	567	<10						
	0.4	<0.05	<3	0.6	5	3328	<10						
	1.1	<0.05	<3	0.1	5	66	<10						
	0.24	<0.05	10	0.2	13	53	<10						
	1.59	<0.05	<3	0.3	7	1700	<10						
	1.59	<0.05	<3	<0.1	8	74	<10						
	0.45	<0.05	<3	0.1	6	9	<10						

Dissolved Manganese Low Level	ug/l	Dissolved Lead Low Level	ug/l	Dissolved Iron Low Level	ug/l	Dissolved Copper Low Level	ug/l
	13	<5	8	<5	<5	<5	<5
	34	<5	274	<5	<5	<5	<5
	1069	<5	<1	<5	<5	<5	<5
	343	<5	33	3069	<5	<5	<5
	437	<5	21	203	<5	<5	<5
	751	<5	51	164	<5	<5	<5
	536	<5					
	164	<5					

Consent of copyright owner required for any other use. For inspection purposes only.



APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence

Meenaboll Landfill Site, County Donegal

ATTACHMENTS TO SECTION J

Accident Prevention & Emergency Response

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTSTO SECTION I CONTINGENCY ARRANGEMENTS

CONTENTS

Sub Section	Title	Page No
J.1	Accident Prevention and Emergency Response	J -1

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION J

Attachment J.1

The following measures and procedures will be implemented on site

Information on invert levels of process waste water drains, provision for fire water run off etc will be dealt with in the detailed design stage.

Procedures for abnormal shutdown operations will be developed following the detail design stage. It is proposed that a SCADA system will be installed on site for the operation of the enclosed landfill flare system and leachate management system which will include emergency call alarms to nominated personnel. This will be dealt with in the detailed design stage.

Training

Training will undertaken by all site personnel with regards to environmental and operational procedures for the site, including emergency response procedures, which will include for accidents, fires and spillages.

Fire Fighting Procedures

Fires in site buildings or plant will be assessed by site staff and will be tackled with site fire fighting equipment if appropriate. The Fire Brigade will be called to ensure any danger has passed. For major fires or fires within the landfill the Fire Brigade will be contacted to deal with the situation. Fire fighting procedures will be developed in conjunction with the local fire brigade.

All fires will be reported immediately to the Senior Executive Engineer. Procedures will be reviewed following any fire.

Breakdown Situations

Breakdown situations will be resolved by staff on site who undertake the day to day operation of the site. Should breakdowns result in a lack of machinery the contractor will supply an alternative piece of machinery until the situation is resolved.

Emergency Situations

Emergency situations will be handled initially by staff on site who will inform the necessary emergency services or departments within Donegal County Council. The following measures will be undertaken:

- Site safety procedures will be adopted on site.
- Trained First Aider available in site.
- First Aid Kit available on site.
- Emergency procedures and emergency numbers displayed in site buildings.

All emergency situations will be reported immediately to the Senior Executive Engineer, Environment Section. Procedures will be reviewed following any accident.

Should staffing levels at the site fall below two and an operative is required to work alone, an hourly "call in" system will be employed in which the employee will be required to contact the manager each hour and confirm the operatives attendance on site.

*For inspection purposes only.
Consent of copyright owner required for any other use.*

Management of Accidental Emissions

1. Leachate

Leachate and groundwater

Groundwater will be monitored in accordance with the licence requirement. Trigger levels will be set for groundwater monitoring. The proposed landfill site will be engineered and therefore the possibility of contamination of groundwater will be minimal. However should monitoring of groundwater indicate contamination then a review of baseline monitoring results will be undertaken to establish that contamination is arising from the site. This will be reported to the EPA as an incident. Leachate levels within the lined cells will be reviewed. The leachate head will be reduced by pumping excess leachate to holding tank.

An investigation will be undertaken to establish the cause and location of the contamination and measures taken to ensure that this does not occur again. All measures taken will be reported to the EPA for their agreement.

Leachate Transfer

Leachate will only be transferred from holding tank to tanker in a bunded area. Procedures will be developed on site for leachate transfer and spill equipment made available for use when required or by the appointed contractor.

Leachate and Surface Water

Surface water will be monitored in accordance with the licence requirement. Should monitoring of surface water indicate contamination then a review of baseline monitoring results will be undertaken to establish that contamination is arising from the site. This will be reported to the EPA as an incident. Surface water will be retained in surface water lagoon. This will be pumped to the leachate-holding tank if required or lined area.

2. Landfill Gas

Permanent gas alarms will be provided in site buildings. When landfill gas concentrations are found within buildings (on or off site) in excess of 1.0% v/v of methane (10% LEL) or 1.5% v/v carbon dioxide, they will be evacuated by the following procedures:

- Warn occupants of the danger and possible risk to life and property; advise necessity of evacuation.
- Ventilate all parts of the building. Affected rooms should be ventilated by opening doors and windows.

- Isolate all ignition sources. All fires and naked flames should be extinguished. Gas should be turned off at the isolation cock. Electricity should be isolated at the meter (check flammable concentrations prior to this).
- Adjoining buildings (occupied/unoccupied) should also be checked.
- Interested parties should be informed. They include the licensee, site operator and the EPA.
- No one will be allowed to re-enter building till all clear is given. Measures will be undertaken to prevent further ingress of gas if required. All interested parties will be informed of control measures and their effectiveness.

*For inspection purposes only.
Consent of copyright owner required for any other use.*



APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence

Meenaboll Landfill Site, County Donegal

ATTACHMENTS TO SECTION K

Remediation, Decommissioning, Restoration and Aftercare

*Consent of copyright owner required for any other use.
For inspection purposes only.*

ATTACHMENTS TO SECTION K RESTORATION AND AFTERCARE

CONTENTS

Sub Section	Title	Page No
K.1	Restoration Scheme	K-1
K.2	Aftercare Management Plan	K-1

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION K

Refer to Drawings

5234.50/10 Capping Details

5234.50/21 Environmental Monitoring Point

5234.50/22 Final Contours

5234.50/23 Surface Water and Groundwater Management

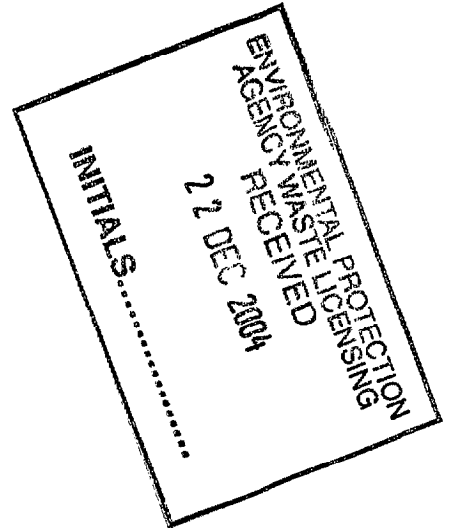
5234.50/24 Landscaping Details.

Attachment K.1 Cessation of Activity

Sections 8 and 15, Volume I of the EIS will form the basis of the Restoration and Aftercare Plan.

Drawing No Figure 5234.50/23 Landscaping Details shows the Final Restoration Levels and proposed Landscaping Details.

*For inspection purposes only.
Consent of copyright owner required for any other use.*



APPLICATION

By

Donegal County Council

to

Environmental Protection Agency

for

Waste Licence

Meenaboll Landfill Site, County Donegal

ATTACHMENTS TO SECTION L

Statutory Requirements

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION L

STATUTORY REQUIREMENTS

CONTENTS

Sub Section	Title	Page No
L.1	Statutory Requirements	L-1

*For inspection purposes only.
Consent of copyright owner required for any other use.*

ATTACHMENTS TO SECTION L

Attachment L.1 Statutory Requirements

To comply with the requirements of the Waste Management Act 1996 as amended, the activity concerned (waste disposal by landfill) must comply with Sections 40(4)(a) to 40(4)(t).

Section 40(4)(a) of the Waste Management Act, 1996 requires that prescribed emission standards and limit values are complied with by the facility.

- **Liquid Emissions:** With respect to emissions to groundwater the appropriate standard is the EU Groundwater Directive (80/68/EEC), as implemented through legislation. The Directive requires that the direct discharge of List I substances to groundwater be prevented, and that the discharge of List II substances should be minimised. The site will be developed on a containment basis in accordance with the requirements of the Landfill Directive. Capping of the existing site will significantly reduce the volumes of leachate being created.

The proposals should prevent the discharge of List I substances to groundwater and minimise the discharge of List II substances.

Monitoring of surface and groundwater at the site will allow current and future impacts to be addressed in the context of the site development. Operation of the facility will therefore be in accordance with the Groundwater Directive.

- **Emissions to air:** A 30 day average dust deposition rate of 350 mg/m²/day (as recommended in T A Luft) at the boundary of the site will be included in the Waste Licence. Results from regular dust monitoring will be compared against these standards.
- **Noise:** The standards applicable to noise emissions at the site are as follows: BS5228 (1984 and 1987) 'Noise Control on Construction and Open Sites' Part 1.

A noise standard of 55 dB(A)_{L_{Aeq}} (daytime) and 45 dB(A)_{L_{Aeq}} (night time) at locations on the boundary will be used. Monitoring results will be compared against these standards.

Section 40(4)(b) of the Waste Management Act 1996 requires that the activity shall not cause environmental pollution, which as defined as:

"The holding, transport, recovery and disposal of waste in the manner which would to a significant extent endanger human health or harm the environment, and in particular:

- a) *Create a risk to waters, the atmosphere, land, soil, plants or animals*
- b) *Create a nuisance through noise, odours or litter*
- c) *Adversely affect the Countryside or places of special interest".*

Monitoring of groundwater, surface water, noise, visual impact and dust emissions in addition to ecological, archaeological and human receptor surveys have been considered within the scope of this application. No significant environmental impacts were identified, therefore the requirements of Section 40(4)(b) of the Waste Management Act 1996 are deemed to be satisfied.

Section 40(4)(bb) of the Waste Management Act 1996 as amended in 2003 requires the activity to comply with Council Directive 1999/31/EC on the landfill of waste.

The site will be developed and operated in accordance with the requirements of the Landfill Directive.

Section 40(4)(c) of the Waste Management Act, 1996 requires that BATNEEC (Best Available Technique Not Entailing Excessive Costs) principles are implemented to minimise as far as practicable potential emissions from the site.

- **Liquid Emissions:** Leachate in the extension to the site will be collected in engineered cells, designed in accordance with the Landfill Directive. Further, with the phased profiling and capping of the existing site, leachate generation will decrease significantly. Assessment has shown no significant impact on major watercourses away from the site and the environmental impact will be reduced progressively as the existing site is restored. The BATNEEC principle for modern landfill sites is generally accepted as being designed, operated and closed in accordance with the Landfill Directive.
- **Emissions to Air:** Landfill gases generated within the landfilled cells will be controlled by venting through passive vents. With the phased capping of the site, it is proposed to introduce a landfill gas flare.

Operational procedures such as the spreading, compaction and covering of wastes are also to be implemented to minimise odour and dust emissions from the site in addition to controlling wind blown litter and pests such as flies and vermin.

Section 40(4)(cc) of the Waste Management Act 1996 as amended in 2003 requires the activity to be consistent with the objective of relevant waste management plan, and will not prejudice measures taken or be taken by the relevant local authority or authorities for the purpose of the implementation of any such plan.

The proposed site is consistent with the Donegal Waste Management Plan, which was the subject of widespread public consultation, and adopted by the Council in 2000. This Plan identified the need for an additional 2 - 4 landfill facilities in Donegal, to provide secure long-term disposal for the County.

Section 40(4)(e) of the Waste Management Act, 1996 requires that financial provision are provided for the facility.

Donegal County Council will provide the funding to operate the Landfill Facility in accordance with legislation.

The necessary Personnel will be employed and trained in the appropriate techniques to manage the Landfill in compliance with legislation.

Section 40(4)(f) of the Waste Management Act 1996 as amended in 2003 requires that energy will be used efficiently in the carrying on of the activity concerned.

The environmental management system for the facility will include the provision for the undertaking of an energy audit.

Section 40(4)(g) of the Waste Management Act, 1996 as amended in 2003 requires that any noise from the activity will comply with, or will not result in the contravention of any regulation under section 106 of the Act of 1992.

The standards applicable to noise emissions at the site are as follows: BS5228 (1984 and 1987) 'Noise Control on Construction and Open Sites' Part 1.

A noise standard of 55 dB(A) L_{Aeq} (daytime) and 45 dB(A) L_{Aeq} (night time) at locations on the boundary will be used. Monitoring results will be compared against these standards.

Section 40(4)(h) of the Waste Management Act 1996 as amended in 2003 requires that necessary measures will be taken to prevent accidents in the carrying on the activity concerned and, where an accident occurs, to limit its consequences for the environment.

An Environmental Management System will be set up at the facility to include environmental management and operational procedures and emergency response procedures. The local fire authority will be consulted with regards to fire fighting procedures for the facility and onsite equipment required. Fire drills will be undertaken. Site personnel will be trained in first aid and appropriate equipment provided on site. Spill kits will be provided on site. Emergency response procedure will include a management structure for the dealing with all emergencies on site.

Power for the site will be provided by an on site generator, with a stand by facility.

Section 40(4)(i) of the Waste Management Act 1996 as amended in 2003 requires that necessary measures will be taken upon the permanent cessation of the activity concerned of the activity concerned (including such a resulting from the abandonment of the activity) to avoid any risk of the environmental pollution and return the site of the activity to a satisfactory state.

The site will be restored in accordance with the requirements of the Landfill Directive. The capping system will include a landfill gas collection layer with a geosynthetic clay liner, a surface water drainage layer and various sub-soil and topsoil finishing layers. The restored site will be subject to an aftercare period involving environmental monitoring, which will continue whilst the waste management licence is maintained.

*For inspection purposes only.
Consent of copyright owner required for any other use.*