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**ASiantaeth yr
AMGYLCHEDD CYMRU
ENVIRONMENT
AGENCY WALES**

ENVIRONMENTAL PROTECTION ACT 1990 - PART II, SECTION 37

NOTICE OF MODIFICATION OF WASTE MANAGEMENT LICENCE

Licence Reference**NOW - 07 - L / NOW - 24 - L****Numbers:****GWYNEDD COUNTY COUNCIL (FORMERLY MEIRIONNYDD
DISTRICT COUNCIL)****Licence Holder:**

WHEREAS a Resolution was passed under Section 11 of the Control of Pollution Act 1974 by Meirionnydd District Council relating to the treating, keeping and disposal of controlled waste on land at Ffridd Rasus, Harlech, Gwynedd (Grid Ref SH 577 338)

NOTICE is HEREBY GIVEN that the Environment Agency in exercise of its powers under Section 37 (1)(a) of the Environmental Protection Act 1990 modifies the Waste Management Licence Reference Nos. NOW-07-L / NOW-24-L as follows:

See attached schedule

Such modification shall take effect from 0:00 hours on 7th July 2000

Signed *Clare Walters*

Name: CLARE WALTERS

Team Leader Waste Licensing – Northern Area (Welsh Region)

Dated: 4th July 2000

**OUTGOING****PERMIT**

**YOUR ATTENTION IS DRAWN TO THE RIGHTS OF APPEAL DETAILED IN THE NOTES AT THE END
OF THIS NOTICE OF MODIFICATION**



SCHEDULE

Original condition reads:

- A:2.2. *The only types of industrial and commercial waste accepted on site shall be those defined in Categories A to C in Appendix II.*

Modification shall read:

- A:2.2. *The only types of industrial and commercial waste accepted on site shall be those defined in Categories A to C in Appendix III.*

Original condition reads:

- A:2.5. *No waste, which is classified as "Special Waste" under the Special Waste Regulations 1996, shall be deposited at the site.*

Delete condition

- A:2.5. *Delete*

Original condition reads:

- A:2.10. *No substance listed by the U.K. Government under the provisions of the E.C. Directive on pollution caused by certain Dangerous Substances Discharged to the Aquatic Environment [76/464/EC] and listed in Annex A of the Ministerial Declaration on the Second International Conference on the Protection of the North Sea, 1987, shall be deposited on the site.*

Modification shall read:

- A: 2.10. *Special waste as defined by regulations in force under Section 62 of the Environmental Protection Act 1990 or by any subsequent amending legislation shall not be accepted at the site.*

Original condition reads:

- A: 5 *Duration of Licence*

- A: 5.1. *This licence and all conditions pertaining to the operation of the site as a waste management facility shall come into effect from 25th April 1997.*

Delete Condition

- A:5.1 *Delete*

Original condition reads:

- A:8 *Working Plan*

- A: 8.1. *A Working Plan shall be submitted and agreed in writing by the Environment Agency within 4 weeks of the date of issue of this modification.*

- A: 8.4. *No waste shall be deposited at the site at any time except when the site is being operated in full compliance with the conditions of this licence*

Delete Conditions

- A.8.1. *Delete*

- A:8.4 *Delete*

WML Number: NOW-007-L

Date of Modification:

Clare Walters, Team Leader Waste Licensing

Clare Walters

Original condition reads:

A: 11. Technical Competence

A: 11.3. *If any "relevant person" is convicted of a relevant offence the licence holder shall notify the Environment Agency within 14 days of conviction.*

Modification shall read:

A.11 Technical Competence

A.11.13 In the event of the Licence Holder and/or any relevant person being convicted of any relevant offence (as defined in Regulation 3 of the Waste Management Licensing Regulations 1994 or any amendment to the aforementioned Regulation) and which is in addition to any already notified to the Agency, then full details shall be provided to the Agency within 14 days of conviction, whether or not the conviction is subsequently appealed. Such details shall include, in respect of each relevant person (as defined in section 74(7) of the Environmental Protection Act 1990 or any subsequent amendments to that section), the nature of the offence, the place and date of conviction, any sentence, and any fine or other penalty imposed.

Add condition

A.11.14 In the event that the Licence Holder lodges an appeal against any such conviction, the Licence Holder shall notify the Agency of this within 14 days of the lodging. The Licence Holder shall notify the Agency of the results of that appeal, within 14 days of the appeal being decided.

Original condition reads:

A: 12 Financial Provisions

A12.1 *It is a precondition to the commencement of the activities authorised by this licence that the licence holder shall procure an agreement which is accepted by the Environment Agency, for the provision of finance adequate to discharge the obligations arising from this licence.*

A: 12.2 *No operations or storage of waste shall be carried out on the site until a financial agreement has been agreed in writing by the Environment Agency.*

A: 12.3 *The financial agreement provided in accordance with Condition A.12.2 shall be maintained until the issue of a Certificate of Completion by the Environment Agency in respect of the site pursuant to Section 39 (9) of the Environmental Protection Act 1990. Thereafter the Environment Agency shall cease to have any right in respect of the financial agreement.*

A: 12.4 *The amount in the financial agreement shall be reviewed annually on the anniversary of the date of issue of this licence so as to increase or reduce it by a percentage increase or reduction (if any) since the date of this licence shown by the Retail Price Index (All items index) in the monthly digest of statistics as prepared by the Government Statistical service published by the Central statistical office and such increase or reduction shall take effect in respect of the period from the said review to the next annual review.*

A: 12.5 *In the event that the Retail Price Index (All items Index) shall no longer be published as described above, the Environment Agency shall designate an alternative published Index to replace it for the purpose of this licence.*

A: 12.6 *The licence holder shall provide a copy of the proposed financial agreement to the Environment Agency within 14 days before the date of renewal of the existing financial provision.*

- A: 12.7 *The terms of the financial agreement shall be such that any withdrawal from the account shall not be permitted unless both the licence holder and the Environment Agency agree or default agreement as shall be determined by arbitration.*
- A: 12.8 *The purpose of the financial agreement shall be to establish a fund to provide for the installation of additional pollution control measures, monitoring measures, maintenance of such measures and corrective or remedial action in the event of the failure of any site engineering works and/or the escape any polluting substance from the site and for the monitoring measures undertaken following the cessation of the depositing of wastes at the site prior to the issue of a Certificate of Completion by the Agency in respect of the site pursuant to Section 39(9) of the Environmental Protection Act 1990.*
- A: 12.9 *Should the licence holder in any way default from maintaining the financial agreement the Environment Agency shall be informed within 2 working days of the date of the default and copies of all correspondence relating to this default shall be provided to the Environment Agency within 5 working days.*

Delete Section

A: 12 *Financial Provision*

Delete section A.12

Add Condition

- C: 1.4 Permanent drainage ditches will be constructed at the perimeter of the site upon final capping to intercept surface run off. The drainage ditches will be lined where appropriate to prevent ingress of surface water into the site, and to prevent leachate from the site entering the drainage system. The drainage system around the site will discharge to the local watercourses. Details of the ditch system, its construction and discharge will be submitted to the Environment Agency for approval a minimum of two months before construction is due to begin. The drainage system will not be built until the above is agreed in writing with the Environment Agency.

Original condition reads:

- C: 3 *Design of Containment System*
- C: 3.1. *Proposal for containment works shall be included in the Working Plan for all new phases of the site - subject to Planning Permission No. 7561DC7OE (dated Sept 1994).*
- C: 3.2. *The basal and side walls of the area designated in Condition C:4.1 shall be lined with a composite site liner consisting of HDPE [or other specified geomembrane] minimum thickness [2 mm] overlying bentonite enriched sand liner of a minimum thickness of [300 mm] and of a permeability not exceeding 1×10^{-9} mS or equivalent.*
- C: 3.3. *Where an HDPE liner or other geomembrane has been specified for any lining or capping of the site it shall be laid, without prejudice to any higher specification in the agreed Working Plan, according to the principles outlined in the minimum standard in Appendix IV of this licence.*
- C: 4. *Materials testing*
- C:4.1. *All materials to be used in the site preparation works shall be tested as a minimum to the standards detailed in Appendix IV.*
- C: 5. *Installation Method Statement*
- C: 5.1. *All site preparation works shall, be detailed in the Working Plan.*

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- C: 5.2. *The laying of the subgrade shall be supervised directly at all times by a suitably qualified and experienced engineer. Each stage of the preparation shall be checked to ensure compliance with the specification in the agreed Working Plan and results of any observations, tests or measurements shall be recorded.*
- C: 5.3. *Subgrade preparation shall be done in such a manner that no damage shall occur to the liner during installation or during the operation of the landfill site.*
- C: 5.4. *The weld seam of the HDPE liner shall be not less than 30 mm and shall be continuous on each length so far as is practicable.*
- C: 6. *Installation Supervision/Testing*
- C: 6.1. *All works on the installation of the liner shall be supervised by a competent engineer to ensure full compliance with the installation method statement.*
- C: 6.2. *Tests on the liner and records to be taken during the installation shall be as a minimum, without prejudice to any higher standards detailed in the Working Plan, those specified in Appendix IV to this licence.*
- C: 7. *Quality Control/Assurance*
- C: 7.1
- a. *As part of the Working Plan a quality assurance plan document shall be submitted to and agreed in writing by the Environment Agency within six weeks of the issue of this modification. This document will utilise the definitions of Quality Assurance and Quality Control given in the definition section of this licence.*
 - b. *The procedures as detailed in the Quality Assurance plan, which shall form part of the Working Plan, shall cover all aspects of site preparation, engineering, operation, monitoring and restoration/aftercare and as a minimum all details specified in the agreed Working Plan.*
- C: 7.2
- a. *The Quality Assurance plan shall have a section covering the installation of the flexible membrane liner and be agreed in writing by the Environment Agency.*
 - b. *The minimum standard of document which shall be acceptable as a Quality Assurance plan for the purposes of this condition shall for example be as detailed in the attached document [Appendix [IV]] "Quality Assurance manual for the Installation of Polyethylene Lining Systems" July 1990 as published by Gundle Lining Construction Corporation. The procedures, tests, record keeping, sampling regimes, and standards in the aforesaid document shall be taken as minimum acceptable and shall not prejudice any greater standard that may be detailed for this site in the Quality Assurance plan.*
 - c. *Where the site licence or Working Plan requires the use of a Geotextile or Geonet then the Quality Assurance plan shall include procedures for the following.*
 - (i) *Manufacturing and Testing*
 - (ii) *Shipment and Storage*
 - (iii) *Installation*
 - (iv) *Repairs*
 - (v) *Placement of Cover Material*

Delete conditions C.3.3, C.4.1, C.5.1, C.5.2, C.5.3, C.5.4, C.6.1, C.6.2, C.7.1, C.7.2.

Modification shall read:

C: 3 Design of Containment System

Provision of Engineered Containment

- C.3.1 Waste shall only be deposited in new phases of the site which have an engineered landfill containment system which is constructed, completed, documented and recorded in accordance with this condition

Construction Quality Assurance of Engineered Containment

C.3.2 No wastes shall be deposited in any new phase unless:

- a) a Construction Quality Assurance Plan covering all elements of the engineered containment system for that phase has been submitted in writing to the Agency and the Agency has given its written consent to it;
- b) details of the identities, relevant experience and relevant qualifications of the personnel who will be providing independent third party Quality Assurance of the construction have been submitted in writing to the Agency and acknowledged in writing by the Agency
- c) the engineered containment system for that phase has been constructed and recorded in accordance with the Construction Quality Assurance Plan;
- d) all changes to the Construction Quality Assurance Plan and independent third party Quality Assurance have been notified in writing to the Agency, and the Agency has given its written consent to those changes;
- e) the Validation Report on the construction of the engineered containment system for that phase has been submitted in writing to the Agency and has been acknowledged in writing by the Agency.

Original conditions read:

- E: 5.2. *Prior to the construction of each cell the water balance shall be recalculated to account for any seasonal variation in precipitation or changes in the absorptive capacity of incoming waste materials. Where an adjustment in cell size is required as a result of such recalculation then the agreement of the Environment Agency shall be given in writing prior to the commencement of any works on that cell*
- E.5.3. *Following the restoration of the site the water balance calculations shall be done for the site at a minimum frequency of six monthly in accordance with paragraph 3.35 of Waste Management Paper 26 (1986) to allow estimations of the leachate produced in the site. Such calculations shall only cease on the granting of a certificate of completion to the site by the Environment Agency.*

Modification shall read:

- E: 5.2 The activities of disposal, or tipping for the purpose of disposal, of waste which are authorised by this licence shall cease on 04 July 2004 and in the event that re-commencement of activities are authorised in accordance with this condition on every fourth anniversary thereafter, and shall not re-commence unless the investigation and risk assessment, or, after the initial cessation, the subsequent review of the investigation and risk assessment, carried out in accordance with condition E.5.3, shows that at the specified dates there is no risk to groundwater under the terms of Regulation 15 of the 1994 Regulations, and this has been accepted in writing by the Agency.

Investigation and risk assessment under regulation 15

- E: 5.3 The licence holder shall undertake an investigation to assess the actual and potential impact of discharges from the site in respect of Regulation 15 of the 1994 Regulations. The investigation shall include the following, or, in the case of a subsequent review, shall include a review of the following:-
- a any relevant site investigation and monitoring data already available and interpretation of that data;
 - b an examination of the hydrogeological conditions of the area in and around the site;
 - c an examination of the possible purifying powers of the soil and subsoil;
 - d an assessment of the risk of pollution and alteration of the quality of groundwater including the risk of harm to other aquatic systems and ecosystems and the likelihood of impending exploitation of groundwater resources from any discharge, whether direct or indirect, of list I or list II substances.

Add conditions:

- E: 5.4 The results of the review shall be submitted in a written report to the Agency. The report shall include the following, or in the case of subsequent reviews, reviews thereof:
- a recommendations of the essential technical precautions which must be taken, paying particular attention to the nature and concentration of the substances present in the matter being disposed of or tipped, the characteristics of the receiving environment and the proximity of the water catchment areas, in particular those for drinking, thermal and mineral water;
 - b recommendations of the technical precautions necessary:
 - i. In the case where groundwater is considered to be permanently unsuitable for other uses, to ensure that no substance in list I can reach other aquatic ecosystems or harm other ecosystems, to ensure that the presence of any list I substance once discharged into the groundwater will not impede exploitation of ground resources and to prevent pollution of groundwater by list II substances; and
 - ii. In the case where groundwater is not considered to be permanently unsuitable for other uses, to prevent any discharges into groundwater of substances in list I and to prevent any pollution of groundwater by substances in list II.
- E: 5.5 The current phasing as specified in the agreed working plan and its relation to the final contours will be reviewed at an annual review meeting to be held with the Environment Agency 12 month after the issuing of this modification.

Original condition reads:

F: POLLUTION CONTROL

F: 1.1. Leachate removed as required by Condition G:12.2 of this licence shall be taken to suitably licensed disposal facility.

Modification shall read:

F: POLLUTION CONTROL

F: 1.1. Leachate removed as required by Condition G:9.2 of this licence shall be taken to suitably licensed disposal facility.

Add Condition

F: POLLUTION CONTROL

F: 1. Leachate Control

F: 1.3 Leachate Wells shall be replaced or shall be installed at positions as agreed in writing with the Agency within 3 months of the issue of this modification. The design for these wells shall be as shown in Figure 4.2.

Original condition reads:

F: 2. Landfill Gas Control

F: 2.1. *If the gas control system is deemed to be inadequate by virtue of Condition G:3.6 of this licence, suitable improvements of additional measures shall be designed and implemented at the earliest practicable time, so as to ensure that gas levels in all sub-surface monitoring points outside the area of waste deposited do not exceed 1 % flammable gas or 0.5 % carbon dioxide by volume in air. The frequency and scope of the gas monitoring programme shall be increased in consultation with the Environment Agency until the new system has been proved to be adequate.*

Modification shall read:

F: 2. Landfill Gas Control

F: 2.1. If the gas control system is deemed to be inadequate by virtue of Condition G: 3.6 of this licence, suitable improvements of additional measures shall be designed and implemented at the earliest practicable time, so as to ensure that gas levels in all sub-surface monitoring points outside the area of waste deposited do not exceed 1 % v/v flammable gas or 1.5 % v/v carbon dioxide by volume in air. The frequency and scope of the gas monitoring programme shall be increased in consultation with the Environment Agency until the new system has been proved to be adequate.

Original condition reads:

F:7. Vermin/Insect/Bird Control

F:7.1. *The site shall be inspected at a minimum of one weekly intervals for infestation by insects and vermin. Disinfestation measures shall be applied as necessary. Records of dates and inspections, disinfestation measures applied and notification to the local authority under Section 3 of the Prevention of Damage by Pests Act 1949 are to be kept in the site diary.*

Modification shall read:

F:7. Vermin/Insect/Bird Control

F:7.1. The site shall be inspected at a minimum of one weekly intervals for infestation by insects and vermin. De-infestation measures shall be applied as necessary. Records of dates and inspections, de-infestation measures applied to be recorded in the site diary.

Original condition reads:

G: 1. Surface Water

G: 1.1. *Water samples shall be taken from the surface water monitoring points as detailed on Drawing No FR/1/97 of this licence from the date of this modification. The samples shall be analysed at the frequency and for the parameters as Detailed in Table 1 of Appendix VII.*

Modification shall read:

G: 1. Surface Water

G: 1.1 Surface water quality monitoring shall be carried out in the vicinity of the site at the surface water monitoring stations established on surface watercourses and other waterbodies close to the site as shown on Figure 4.1 attached to this modification.

Add conditions:

G: 1.2 Monitoring and sampling of surface water in the vicinity of the site shall be carried out and recorded in accordance with the standards specified in Table 20.2.B below.

Table 20.2.B:

DETERMINANDS	MONITORING FREQUENCIES
<i>pH</i>	<i>Monthly (and quarterly)</i>
<i>Temperature</i>	<i>Monthly (and quarterly)</i>
<i>Electrical conductivity</i>	<i>Monthly (and quarterly)</i>
<i>Dissolved oxygen</i>	<i>Monthly (and quarterly)</i>
<i>Ammoniacal nitrogen</i>	<i>Monthly (and quarterly)</i>
<i>Chlorides</i>	<i>Monthly (and quarterly)</i>
<i>Chemical oxygen demand</i>	<i>Monthly (and quarterly)</i>
<i>Sulphates</i>	<i>Quarterly</i>
<i>Total alkalinity (as CaCO₃ at pH 4.5)</i>	<i>Quarterly</i>
<i>Total oxidised nitrogen</i>	<i>Quarterly</i>
<i>Total organic carbon</i>	<i>Quarterly</i>
<i>Na</i>	<i>Quarterly</i>
<i>K</i>	<i>Quarterly</i>
<i>Ca</i>	<i>Quarterly</i>
<i>Mg</i>	<i>Quarterly</i>
<i>Fe</i>	<i>Quarterly</i>
<i>Mn</i>	<i>Quarterly</i>
<i>Cd</i>	<i>Quarterly</i>
<i>Cr</i>	<i>Quarterly</i>
<i>Cu</i>	<i>Quarterly</i>
<i>Ni</i>	<i>Quarterly</i>
<i>Pb</i>	<i>Quarterly</i>
<i>Zn</i>	<i>Quarterly</i>

Monitoring and Sampling Records

G.1.3 A record of the surface water monitoring and sampling results shall be kept and maintained to the standards specified in Table 20.3.C below.

Table 20.3.C:

Surface water Monitoring and Sampling Records	Specified Standards
<i>Keeping and maintenance of records</i>	<p>a) <i>Data storage media: paper or computerised records ;</i></p> <p>b) <i>Data content; including:</i></p> <ul style="list-style-type: none"> i) <i>Determinands monitored/sampled;</i> ii) <i>date and time of sampling;</i> iii) <i>Results of measurements/sample analyses, with error limits;</i> iv) <i>Interpretation and review of results;</i> v) <i>name of person sampling;</i> vi) <i>type and serial number of any portable instrument(s) used;</i> vii) <i>last calibration of any instruments used.</i>
<i>Submission of records</i>	<i>A copy of the records of each monitoring and sampling result shall be submitted to the Agency within 1 month of its being carried out, in a format agreed with the Agency.</i>

Original condition reads

G: 2 *Groundwater Level Quality*

G: 2.1 *Water samples shall be taken from the groundwater monitoring boreholes 1,8,9,11 and 12 NRA2 and NRA 3 as detailed on Drawing No. FR/1/97 of this licence from the date of this modification. The samples shall be analysed at the frequency and for the parameters as detailed in Table 1 of Appendix VII.*

Modification shall read:

G.2.1 Engineered groundwater monitoring systems shall be provided to enable monitoring of the groundwater outside the waste body.

The engineered external groundwater monitoring system provided for the site shall be provided by the boreholes as agreed in writing with the Agency within 3 months of the issue of this modification.

Add conditions:

G.2.4 Monitoring and sampling of groundwater external to the waste body of the site shall be carried out and recorded in accordance with the standards specified in Table 19.3.B below.

Table 19.3.B:

DETERMINANDS	MONITORING FREQUENCIES
Water level	Monthly (and quarterly)
pH	Monthly (and quarterly)
Temperature	Monthly (and quarterly)
Electrical conductivity	Monthly (and quarterly)
Dissolved oxygen	Monthly (and quarterly)
Ammoniacal nitrogen	Monthly (and quarterly)
Chlorides	Monthly (and quarterly)
Sulphates	Quarterly
Total alkalinity (as CaCO ₃ at pH 4.5)	Quarterly
Total oxidised nitrogen	Quarterly
Total organic carbon	Quarterly
Na	Quarterly
K	Quarterly
Ca	Quarterly
Mg	Quarterly
Fe	Quarterly
Mn	Quarterly
Cd	Quarterly
Cr	Quarterly
Cu	Quarterly
Ni	Quarterly
Pb	Quarterly
Zn	Quarterly

Monitoring and Sampling Records

G.2.5 A record of the groundwater monitoring and sampling results shall be kept and maintained in accordance with the standards specified in Table 19.4.C below.

Table 19.4.C:

Groundwater Monitoring and Sampling Records	Specified Standards
Keeping and maintenance of records	<p>a) Data storage media: paper or computerised records ;</p> <p>b) Data content; including:</p> <ul style="list-style-type: none"> i) Determinands monitored/sampled; ii) date and time of sampling; iii) Results of measurements/sample analyses, with error limits; iv) Interpretation and review of results; viii) name of person sampling; ix) type and serial number of any portable instrument(s) used;

	x) last calibration of any instruments used.
Submission of records	A copy of the records of each monitoring and sampling result shall be submitted to the Agency within 1 month of its being carried out, in a format agreed with the Agency.

Original conditions read:

- G: 3.1. *Monitoring for both the methane and carbon-dioxide components of landfill gas shall be carried out on each gas well, gas monitoring borehole and at each monitoring point specified on Drawing No. FR/1/97 of this licence. This monitoring shall be carried out by taking a minimum of three repeated readings from each monitoring point during the course of one day at intervals of not more than 7 days*
- G:3.2. *Portable gas detection equipment used for landfill gas monitoring shall be calibrated in accordance with the manufacturer's instructions for the gas it is intended to monitor.*

Modification shall read:

G.3.1 Landfill Gas Monitoring and Sampling Programme

Monitoring and sampling of landfill gas will take place outside the waste body of the site at locations 1,2,3,7,8,9,10,11,12,NRA2 and NRA3 as shown on Figure 8.1 and at the four additional boreholes shown on Figure No. 8.1 shall be carried out and recorded to the standards specified in Table 27.1.A below unless otherwise agreed in writing with the Agency.

Monitoring and sampling of landfill gas within the waste body of the site shall be undertaken at locations to be agreed in writing with the Agency within 3 months of the issue of this modification and shall be carried out and recorded to the standards specified in Table 27.1.A below.

Table 27.1.A:

LANDFILL GAS MONITORING DETERMINANDS	MONITORING FREQUENCIES
Flammable gas	Minimum once every month.
Carbon dioxide	Minimum once every month
Oxygen	Minimum once every month
Flowrate	Minimum once every month
Differential pressure	Minimum every 6 months
Atmospheric pressure	Minimum every 6 months

Monitoring and Sampling Records

- G.3.2 A record of the landfill gas monitoring and sampling results shall be kept and maintained to the standards specified in Table 27.2.B below.

Table 27.2.B:

Landfill Gas Monitoring and Sampling Records	Specified Standards
Keeping and maintenance of records	<p>a) Data storage media: paper or computerised records ;</p> <p>b) Data content; including:</p> <ul style="list-style-type: none"> i) Determinands monitored/sampled; ii) date and time of sampling; iii) Results of measurements/sample analyses, with error limits; iv) Interpretation and review of results; xi) name of person sampling; xii) type and serial number of any portable instrument(s) used; xiii) last calibration of any instruments used.
Submission of records	A copy of the records of each monitoring and sampling result shall be submitted to the Agency within 1 month of its being carried out, in a format agreed with the Agency.

Original condition reads

G: 3.5. *The results of the gas monitoring required by Conditions G:3.1 to G:3.4. of this Licence shall be written into the site diary as required to be kept by Condition I:2.1. of this Licence. A true copy of these results shall be forwarded to the Environment Agency at 1 monthly intervals.*

The parameters to be measured and recorded in the site diary shall include:-

Gas Content

- % Lower Explosive Limit
- % Gas in air
- % Oxygen
- % Carbon Dioxide

Gas Chromatography - to include hydrogen

Date, time, weather conditions, air temperature, state of tip i.e. age of refuse.

Gas Pressure

- a. within waste
- b. within surrounding strata
- c. barometric pressure

Gas Flow Rates [efficiency of extraction system] total amount extracted and or vented.

Temperature

- a. *of waste - at various depths*
- b. *of surrounding gas*
- c. *of gas being extracted*

Water Levels

- a. *within waste including leachate levels*
- b. *within surrounding strata*

Water Quality

- a. *leachate within site*
- b. *groundwater*
- c. *surrounding streams*

Staff Instruction and Training In:-

- a. *use of equipment*
- b. *safety procedures [including entry into confined spaces]*
- c. *emergency procedures*
- d. *health of staff [reference asthmatics, procedures when exposed to hazardous materials]*

Delete condition G.3.5

Original condition reads

- G: 4.1. *A record shall be kept of the site levels relative to Ordnance datum the remaining volume to be landfilled at the site.*

This record shall be updated annually from the date of issue of this licence and a void take up survey compiled. Datum points shall be agreed in writing with the Environment Agency prior to any recording of site levels.

Modification shall read:

G:4. ENGINEERING SURVEYS

G.4.1 Engineering surveys shall be carried out as follows :-

- a) On the commencement of any permanent engineering works carried out to meet the requirements of these licence conditions, to establish the levels and co-ordinates of the base of the works for validation and recording purposes.
- b) On the completion of those permanent engineering works carried out to meet the requirements of these licence conditions, to establish the levels and co-ordinates of the completed works for validation and recording purposes.
- c) On an annual basis, commencing 12 months after the date of issue of this modification, to determine the contours of the site and the deformation and settlement of the site since the previous survey.

The results of any such surveys shall be submitted to the Agency within 1 month of the completion of the works.

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Original condition reads :

G:9 Leachate Levels and Quality

G.9.1 Water samples shall be taken from the leachate monitoring boreholes 4 and 5 as detailed on Drawing No. FR/1/97 as from the date of this modification. The samples shall be analysed at the frequency and for the parameters as detailed in Table 1 of Appendix VII.

Modification shall read:

G.9.1 Monitoring and sampling of leachate arising within the site shall be carried out and recorded at the leachate monitoring wells as shown in Figure no. 4.1 attached to this modification and to the standards specified in Table 12.1.A below.

Table 12.1.A:

LEACHATE MONITORING DETERMINANDS	MONITORING FREQUENCIES
Depth of leachate from the base of the cell	Monthly
pH	Monthly
Temperature	Monthly
Electrical conductivity	Monthly
Cl	Quarterly
NH4-N	Quarterly
SO4	Quarterly
Alkalinity	Quarterly
COD	Quarterly
BOD	Quarterly
TON	Quarterly
TOC	Quarterly
Na	Quarterly
K	Quarterly
Ca	Quarterly
Mg	Quarterly
Fe	Annually
Mn	Annually
Cd	Annually
Cr	Annually
Cu	Annually
Ni	Annually
Pb	Annually
Zn	Annually

Add condition:

Monitoring and Sampling Records

G.9.3 A record of the leachate monitoring and sampling results shall be kept and maintained to the standards specified in Table 12.2.B below.

Table 12.2 B

Leachate Monitoring and Sampling Records	Specified Standards
<i>Keeping and maintenance of records</i>	<p>a) <i>Data storage media: paper or computerised records ;</i></p> <p>b) <i>Data content; including:</i></p> <ul style="list-style-type: none"> i) <i>Determinands monitored/sampled;</i> ii) <i>date and time of sampling;</i> iii) <i>Results of measurements/sample analyses, with error limits;</i> iv) <i>Interpretation and review of results;</i> xiv) <i>name of person sampling;</i> xv) <i>type and serial number of any portable instrument(s) used;</i> xvi) <i>last calibration of any instruments used.</i>
<i>Submission of records</i>	<i>A copy of the records of each monitoring and sampling result shall be submitted to the Agency within 1 month of its being carried out, in a format agreed with the Agency.</i>

RIGHTS OF APPEAL

Section 43(1) of the Environmental Protection Act 1990 provides that:

Where, except in pursuance of a direction given by the National Assembly for Wales,

- a an application for a licence or a modification of the conditions to the licence is rejected
- b a licence is granted subject to conditions

the applicant may appeal from the decision to the National Assembly for Wales

Therefore if you feel aggrieved by the decision or any of the conditions to the licence as granted you may obtain the appropriate form on which to give notice of an appeal from:-

National Assembly for Wales
Cathays Park
Cardiff
CF10 3NQ

This notice of appeal should be accompanied by the following information: a copy of the licence; a copy of any correspondence relevant to the appeal; a copy of any other document relevant to the appeal including, in particular, any relevant consent, determination, notice, planning permission, established use certificate or certificate of lawful use or development; and a statement indicating whether you wish the appeal to be in the form of a hearing or on the basis of written representations. You are also required to serve a copy of your notice of appeal, together with copies of any of the above documents that have accompanied your notice of appeal, on the Environment Agency (at the address overleaf). You should appeal within 6 months of the date that this notice takes effect but the National Assembly for Wales may allow notice of appeal to be given after the expiry of this time period.

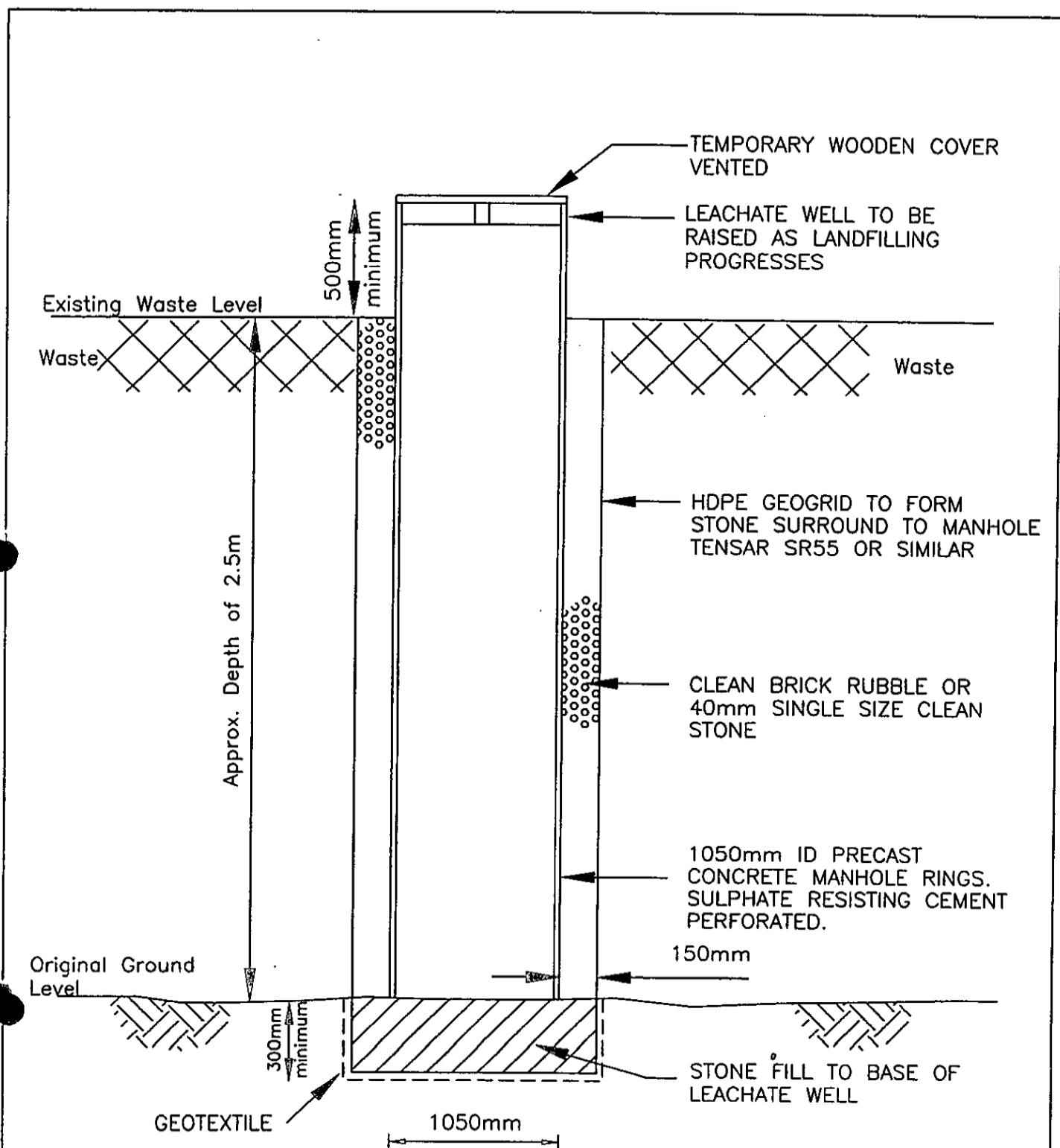


FIGURE 4.2 DETAIL OF A LEACHATE MONITORING WELL