OUTGOING

No. 282

CONTROL OF POLLUTION ACT 1974
PART I

PERMIT

WASTE DISPOSAL LICENCE

THE * Cumbria County Council
HEREBY GRANT a Waste Disposal Licence, pursuant to an application dated 12 October 1993, in respect of the following:

Full name and address of licence holder	H & E Trotter Low Dyke Calthwaite, Cumbria
Full name and address of local representative (if any) of licence holder	
Location of site to which this licence relates	Thackwood Monkcastle Southwaite Carlisle
Form of deposit or disposal to which this licence relates	Landfill
Types of waste of which deposit or disposal is authorised and any limitation as to quantity	See attached schedule

This Licence is granted subject to the following conditions:—

See conditions attached

Dated 29 September 19 94 . (*Signed*) D. Cole

(*Designation*) Director of Economy and Environment

THE LICENCE HOLDER SHOULD READ CAREFULLY THE NOTES OVERLEAF.

* Insert name of Waste Disposal Authority.

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CONTROL OF POLLUTION ACT 1974

WASTE DISPOSAL LICENCE

CONDITIONS OF OPERATION

REFERENCE NO E160.503

LICENCE HOLDER:	H & E Trotter Low Dyke Calthwaite Cumbria	LOCATION:	Thackwood Monkcastle Southwaite Carlisle Cumbria NGR: NY 425 466

1. Working Plan

1.1. The areas that are the subject of this licence are outlined in red on Drawing number THW.1.1/VCD.

1.2. The site shall be operated in all respects as described in the working plan and shall additionally be subject to the conditions below.

1.3. The working plan shall consist of the Cumbria County Council Application Form and all documents, plans, drawings or other submissions made as part of the application and listed on the Application Form under Section 21. In the case of any proposals contained in the working plan being contradictory to the licence conditions, the conditions shall prevail.

1.4. The working plan may be varied, and such variations shall be deemed to be part of the working plan. No variation shall be brought into effect until details have been submitted in writing to the Waste Regulation Authority, and their written confirmation of receipt has been received.

1.5. Any notification which the licence holder is required to make under these conditions shall be made to:

The Senior Waste Regulation Officer
Economy and Environment
Cumbria County Council
Citadel Chambers
Carlisle
CA3 8SG

Telephone: 0228 812672

2. **Permitted Wastes**

The total quantity of waste deposited shall not exceed 2,125 tonnes per week and shall not exceed 74,999 tonnes per annum.

2.1. **Solid Waste**

Only solid wastes of the following description shall be deposited.

2.1.1. Inert Material

Not more than 200 tonnes per week.

Inert material shall consist of:

2.1.1.1. soil, sand, clay, stone, concrete, bricks, slate, glass, and ceramic materials. Such inert material must not be contaminated with any leachate forming materials, including any of the following wastes (which are listed for the purposes of illustration only): paper, cardboard, foodstuffs, animal flesh, vegetable matter, plaster, plasterboard, wood, timber, sawdust, textiles, metal and plastic objects,

2.1.1.2. hard bonded asbestos products arising from building demolition or construction work.

2.1.2. Waste From Construction, Demolition or Building

Not more than 200 tonnes per week.

Waste from construction, demolition or building shall be waste containing mainly inert materials as described above, but also non-inert materials which arise necessarily from construction, demolition or building of any structure (which includes improvement, repair or alteration of a building or structure).

2.1.3. Household Waste

Not more than 500 tonnes per week.

Waste defined as household waste by Section 75(5) of the Environmental Protection Act 1990 and The Controlled Waste Regulations 1992 excluding any clinical waste as defined in The Controlled Waste Regulations 1992.

2.1.4. Commercial Waste

Not more than 600 tonnes per week.

Waste defined as commercial waste by Section 75(7) of The Environmental Protection Act 1990 and The Controlled Waste Regulations 1992, excluding any clinical waste as defined in The Controlled Waste Regulations 1992.

2.1.5. Industrial Waste

Not more than 600 tonnes per week.

Waste defined as industrial waste by Section 75(6) of The Environmental Protection Act 1990 and The Controlled Waste Regulations 1992, excluding any clinical waste as defined in The Controlled Waste Regulations 1992.

2.2. **Liquid Waste and Special Waste**

No liquid waste or special waste (as defined by The Control of Pollution (Special Waste) Regulations 1980) shall be deposited.

2.3. **Difficult Waste**

No difficult waste (as listed in Appendix 7c of Waste Management Paper 26) shall be deposited except for the following waste types and quantities :

Waste Description	Code of Waste
Scrap Rubber	L30
Sewage Sludge	Q40
Food Processing waste	T20

The quantity of difficult waste shall not exceed 20% of the total quantity of waste deposited on the site in any calendar month.

2.4. **Clinical Waste**

Not more than 25 tonnes per week.

Clinical Waste is defined in The Controlled Waste Regulations 1992.

Only wastes defined by groups C, D and E in paragraph 3.1.1 of Waste Management Paper 25 shall be deposited. Each load shall be disposed of in accordance with condition 26 of this licence.

No waste defined by groups A (which includes animal carcasses arising from veterinary and similar premises) and B of paragraph 3.1.1 of Waste Management Paper 25, shall be deposited. (The clinical waste groups are described in the explanatory note at the end of this licence).

3. **Reception of Waste**

3.1. All waste arriving at the site shall be inspected before deposit and any load not conforming to the permitted waste types specified in Condition 2 shall be rejected.

3.2. Where waste is found upon deposit to contain wastes not permitted by Condition 2, not previously detected, the whole load shall be removed immediately to a specified storage area or from the site.

3.3. The specified storage area for the storage of wastes awaiting removal, in accordance with Condition 3.2, shall be agreed in writing with the Waste Regulation Authority.

3.4. The maximum period non-permitted waste may remain at the specified storage area is five days. The Waste Regulation Authority shall be notified before the end of the working day on which such waste is received at the site.

4. **Sampling of Waste by the Waste Regulation Authority**

4.1. Samples of any waste entering the site or undergoing disposal on the site and samples of any gaseous, liquid or particulate matter on or derived from the site may be taken by, or under the direction of the Waste Regulation Authority.

4.2. Site personnel shall provide assistance and facilities to the Waste Regulation Officers on request.

5. **Management and Supervision of the Site**

5.1. The terms of this waste disposal licence shall be made known to whoever is given responsibility for receiving and handling waste at the site.

5.2. A copy of the licence shall be on display at the site office.

5.3. The name of the nominated person with management responsibility, to ensure compliance with this licence, shall be provided in writing to the Waste Regulation Authority.

5.4. Whenever waste is being received or handled at the site a minimum of 2 operatives shall be on site.

5.5. The operator shall inform the Waste Regulation Authority in writing in advance of any change of the nominated person with management responsibility.

6. **Hours of Operation**

The site shall be open for the receipt and disposal of wastes only within the following hours:

Monday to Friday:	07.00 to 19.00
Saturdays:	07.00 to 12.00

The site shall not be open for the receipt and disposal of waste on Sundays or Bank Holidays without the prior written consent of the County Planning Authority and the Waste Regulation Authority.

7. **Record Keeping and Recording of Incoming Waste**

7.1. A record shall be kept of the types and quantities of waste deposited on the site. The record shall give an accurate description of:

7.1.1. the person, firm or organisation delivering the waste to the site,

7.1.2. the registration number of each vehicle delivering waste to the site,

7.1.3. the source of arising of the waste,

7.1.4. the quantity, in cubic metres or tonnes, and detailed description of each individual load and its classification in accordance with the types of waste described in Condition 2 of this licence.

7.2. Upon receipt of a written request, and where deposits are restricted to limited sources of waste, or restricted numbers of vehicles depositing waste, the Waste Regulation Authority may agree a more limited form of record keeping. This shall be implemented only with written agreement from the Waste Regulation Authority.

7.3. The record made in accordance with condition 7.1 or 7.2 above shall be retained by the licence holder for two years and shall be made available for inspection by the Waste Regulation Authority on request.

7.4. A summary of the waste deposited at the site in each calendar month including a nil return in the event of no deposit shall be forwarded to the Waste Regulation Authority not later than the 14th day of the month following the month to which the summary relates.

7.4.1. The summary shall be submitted on Form WRA 1, provided by the Waste Regulation Authority and shall include the following information,

7.4.1.1. the quantity of each waste classified in accordance with the types of waste described in condition 2 of this licence,

7.4.1.2. the total quantity of waste deposited at the site during the month to which the summary relates.

7.5. A summary of the waste deposited at the site in each twelve month period between 1 April in any year and 31 March in the following year shall be forwarded to the Waste Regulation Authority no later than 30 days after the end of the twelve month period to which the summary relates.

7.5.1. The summary shall be submitted on Form WRA 2, provided by the Waste Regulation Authority and shall include the following information;

7.5.1.1 the quantity of each waste classified in accordance with the types of waste described in condition 2 of this licence,

7.5.1.2 the total quantity of waste deposited at the site during the period to which the summary relates,

7.5.1.3 the remaining licensed landfill capacity as at 31 March of the year to which the summary relates.

7.6. Copies of the yearly and monthly summaries shall be retained by the licence holder for two years from the date of submission to the Waste Regulation Authority.

8. Commencement/Temporary Cessation of Use of Site

8.1. The Waste Regulation Authority shall be notified in writing at least 28 days before any waste is deposited on site.

8.2. Any temporary cessation of operations for a period in excess of 28 consecutive days shall be notified in writing to the Waste Regulation Authority.

8.3. Not less than 14 days notice shall be given to the Waste Regulation Authority in writing of the date on which operations are to recommence in the event of a temporary cessation.

9. Site Office

A site office shall be provided and shall be equipped to allow the requirements of this licence to be carried out.

10. Notice Board

A notice board of durable material shall be erected and maintained at the site entrance, in a location agreed by the Waste Regulation Authority. This board shall display the following information:

10.1. the site licence number,

10.2. name, address and telephone number of the operator,

10.3. name, address and telephone number of the Waste Regulation Authority,

10.4. opening hours.

10.5. this information shall be kept up to date.

11. Site Roads and Vehicle Cleaning

11.1. A site road, parking and turning areas shall be provided, as specified in the working plan. The road shall have a hard surface of suitable road construction material such that it shall be usable by any vehicle or plant equipment at any time.

11.2. The road shall also be maintained to such a standard that vehicles which leave the site and access roads between the highway and the site do not foul the highway with mud or other material. Additional wheel cleaning equipment shall be provided if this is necessary to prevent mud from being carried off the site.

12. Fencing and Site Security

12.1. All existing fences and hedges shall be maintained in good condition and a lockable gate shall be provided at the entrance to the site which is sufficient to prevent unauthorised vehicular access.

12.2. The gate at the site entrance shall be kept locked whenever the site is unmanned, and in any case outside the permitted opening hours.

12.3. Before any waste is deposited in any cell, that cell shall be enclosed by security fencing. Such fencing shall have a minimum height of 1.8 metres and shall be maintained until the cell is finally capped in accordance with condition 39. Gates of commensurate height shall also be provided. These gates shall be kept locked whenever the cell is not in use.

12.3.1. Before the security fencing is installed details showing the specification of the fencing and the exact area which is to be fenced shall be submitted to the Waste Regulation Authority and their written approval of the proposals received.

13. Fuel Storage

13.1. Any temporary fuel storage bowser shall only be on site when the plant for which the fuel is required is also present. The bowser shall have locks to prevent unauthorised access to its contents. When the site is unattended the bowser shall be securely locked and, as far as is practicable, be placed out of sight from the road. Any incident leading to loss of fuel from the bowser shall be reported to the Waste Regulation Authority within twenty four hours of discovery.

13.2. Any fuel storage tanks shall be located within a bund having a capacity of not less than 110% of the volume of the largest container stored within the area. The base and bund walls shall be constructed of impermeable material with no outlet. All inlets, outlets, vent pipes and gauges shall be within the bunded area.

13.3. Not more than 10% of the bunded area shall be allowed to fill with water.

14. Site Preparation

14.1. The cells shall be constructed as shown in The Working Plan. The base of each cell shall be formed so that there is a fall to the leachate pumping chamber.

14.2. Before any waste is deposited in any cells a temporary clay bund two metres high shall be left in place around the perimeter of cells 2,3,4 and 5 to isolate any waste deposited in one cell from cells that have not yet been prepared for infilling.

14.3. No waste shall be deposited within two metres in any direction from the top of the temporary bund.

14.4. When infilling of waste in cell 3 commences the temporary bund between cell 2 and cell 3 shall be removed. Similarly when infilling of waste in cell 4 occurs the bund between cell 2 and cell 4 shall be removed and when infilling of waste in cell 5 occurs the bund between cell 4 and cell 5 and cell 3 and cell 5 shall be removed.

14.5. Before the deposit of waste in any cell:

14.5.1. the levels of the base of the cell, including its lowest point, shall be taken and submitted to the Waste Regulation Authority and

14.5.2. measurements shall be taken on the base of the site to demonstrate that the in situ clay has a depth of at least 3 metres. The method and number of measurements shall be agreed in writing with the Waste Regulation Authority. The results of such measurements shall be inspected and approved by the Waste Regulation Authority and the National Rivers Authority.

14.5.3. the cell shall be inspected and approved by the Waste Regulation Authority and the National Rivers Authority.

14.6. Where waste is deposited outside the cells but within the licensed area, the area shall be sealed in accordance with the National Rivers Authority (North West Unit) Earthworks on Landfill Sites. Before deposit of waste the area shall be inspected and approved by the Waste Regulation Authority and the National Rivers Authority.

15. **Leachate Management**

15.1. Before any waste is deposited in any cell;

15.1.1. the leachate monitoring well and the leachate collection/pumping chamber shall be constructed as shown in The Working Plan to the National Rivers Authority specification. The height of the chambers and wells shall be maintained one metre above the surrounding waste at all times.

15.1.2. the basal drains shall be constructed as shown in The Working Plan to a standard agreed in writing with the Waste Regulation Authority and the National Rivers Authority. The basal drains shall be laid to the leachate collection/pumping chamber within each cell as shown in The Working Plan. The basal drains shall be designed to permit access for inspection and maintenance.

15.1.3. the leachate monitoring wells, the leachate collection/pumping chamber and the basal drains shall be inspected and approved by the Waste Regulation Authority and The National Rivers Authority.

15.2. The rings of the leachate collection/pumping chambers shall be clearly numbered on the inside consecutively from the bottom upwards.

15.3. Leachate within all leachate collection/pumping chambers shall be removed off site for disposal elsewhere such that the head of leachate does not exceed one metre in height above the lowest point in the cell at any time.

15.4. No discharge of leachate shall take place from the site other than in accordance with any required consent from the National Rivers Authority or North West Water plc. A copy of any agreement reached or consent issued shall be furnished to the Waste Regulation Authority before any discharge is made.

15.5. A set of manhole keys shall be kept at the site office and be made available for use by officers of the Waste Regulation Authority.

15.6. Leachate collection drains and pipework and surface water drains shall be inspected daily where accessible and where they are found to be defective shall be repaired within 24 hours, unless otherwise agreed with the Waste Regulation Authority.

16. Leachate Monitoring, Analysis and Records

16.1. Written records of the following shall be made and shall be kept at the site office. The results shall be recorded in a format agreed with the Waste Regulation Authority and shall be available for inspection by the Authority upon request.

16.1.1. the level, in metres A.O.D., of the base of each monitoring well and collection/pumping chamber,

16.1.2. the level, in metres A.O.D., of the top of each monitoring well and collection/ pumping chamber. This level shall be recorded within two weeks of the height of any leachate or pumping chamber being increased,

16.1.3. the depth of leachate, in metres, in all monitoring wells and collection/ pumping chambers,

16.1.3.1. the depth of leachate shall be recorded daily in all the monitoring wells and collection pumping chambers in the operational cells of the site,

16.1.3.2. the depth of leachate in the completed cells shall be measured at a frequency that has been agreed in writing with the Waste Regulation Authority.

16.1.4. the quantity of leachate disposed of elsewhere.

16.2. Leachate samples shall be taken from the leachate chimney of each cell of the site and analysed every three months. The parameters measured shall include:

i	pH	ii	Conductivity
iii	Chemical Oxygen Demand	iv	Biochemical Oxygen Demand
v	Ammoniacal nitrogen	vi	Chloride
vii	Alkalinity*	viii	Total oxidised nitrogen
ix	Total organic carbon	x	Sodium
xi	Potassium	xii	Calcium
xiii	Magnesium	xiv	Sulphates

*total alkalinity as $CaCO_3$ at pH 4.5

A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken.

16.3. In addition to those parameters listed in condition 16.2 the samples shall be analysed for the following parameters every 12 months:

xv	Iron	xvi	Manganese
xvii	Cadmium	xviii	Chromium
xix	Copper	xx	Nickel
xxi	Zinc	xxii	Lead
xxiii	Mercury		

A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken.

16.4. The monitoring programme shall be agreed annually. The revised programme shall be agreed with the Waste Regulation Authority. In default of agreement being reached, monitoring shall be carried out as defined in writing by the Waste Regulation Authority.

16.5. Written records of the following shall be made in relation to all cells. The results shall be recorded in a format agreed with the Waste Regulation Authority and shall be available for inspection by the Authority upon request. Within one month of completion of any cell all the records shall be forwarded to the Waste Regulation Authority.

a) Weather

The quantity of rainfall in millimetres. This measurement shall be recorded on a daily basis.

b) Clean Water Control

The quantity of water in cubic metres removed from each cell, together with the dates of the removal, during the interim period between the preparation of the cell and the start of the filling.

c) Operational Records

the following information shall be recorded for each cell

i The date of the first deposit of waste,

ii The date of the final deposit of waste,

iii The number of days between the date of the final deposit and the date of capping to the standard specified in condition 39.2 of this licence,

iv The number of days with intermediate capping,

v The total number of days between the first deposit and capping to the standard specified in condition 39.2 of this licence,

vi The number of days taken to emplace the capping material to the standard specified in condition 39.2 of this licence,

vii The quantities of each of the following categories of waste, deposited, in tonnes;

inert,

construction/demolition,

household,

commercial,

industrial,

difficult.

17. **Surface Water Drainage**

17.1. No waste shall be deposited in water.

17.2. A surface water cut-off trench shall be constructed as specified in the Working Plan and shall drain to the existing ditch.

17.3. The existing and proposed surface water drainage ditches shall be diverted or constructed as necessary to ensure that the site is adequately drained. Additional field drains shall be laid as necessary.

17.4. No discharge of water shall take place from the site other than with the agreement of, or in accordance with any required consent from, the National Rivers Authority or North West Water plc. A copy of any consent issued shall be furnished to the Waste Regulation Authority.

17.5. The licence holder shall take precautions to prevent the contamination of any surface water courses in the vicinity of the site. In the event of contamination occurring, immediate steps shall be taken to alleviate the effects of the contamination and to prevent further contamination. The Waste Regulation Authority and The National Rivers Authority shall be notified as soon as possible and in any case not later than 10.00 a.m. the following working day after any incident.

17.6. In the event of any drainage leaving the site becoming polluted it shall be prevented from leaving the site and remedial work shall be undertaken, as agreed in writing with the Waste Regulation Authority and the National Rivers Authority.

18. **Surface Water Monitoring**

PROVISION OF MONITORING POINTS

18.1. Surface water monitoring shall be carried out at the three monitoring points on the western drain shown in The Working Plan and at two other points on the eastern drain which shall be agreed in writing with the Waste Regulation Authority and the National Rivers Authority. Agreed

BACKGROUND MONITORING

18.2. Before any waste is deposited samples shall be taken monthly from the monitoring points as described in condition 18.1 for a minimum of 3 months and analysed for those parameters described in condition 18.6.

18.3. In addition to the requirements of condition 18.2 at least one set of monthly samples shall be analysed for the following additional parameters:

i	Sulphates	ii	Alkalinity*
iii	Total Oxidised Nitrogen	iv	Total Organic Carbon
v	Sodium	vi	Potassium
vii	Calcium	viii	Magnesium
ix	Iron	x	Manganese
xi	Cadmium	xii	Chromium
xiii	Copper	xiv	Nickel
xv	Lead	xvi	Zinc

*Total alkalinity as $CaCO_3$ at pH 4.5

18.4. A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken and before any waste is deposited.

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SUBSEQUENT MONITORING

18.5. Conductivity measurements shall be carried out daily on any water collecting on site and the record of the results shall be kept at the site office.

18.6. At monthly intervals surface water samples from the five monitoring points defined in condition 18.1 shall be analysed for the following parameters;

i	pH	ii	Conductivity
iii	Chemical Oxygen Demand	iv	Dissolved Oxygen
v	Ammoniacal Nitrogen	vi	Chloride

18.7. A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken.

18.8. The monitoring programme shall be agreed annually. The revised programme shall be agreed with the Waste Regulation Authority. In default of agreement being reached, monitoring shall be carried out as defined in writing by the Waste Regulation Authority.

19. **Groundwater Monitoring**

PROVISION OF MONITORING POINTS

19.1. Groundwater samples shall be taken from boreholes 1,2,3,4 and 8 as indicated in The Working Plan and a further groundwater monitoring borehole shall be installed adjacent to cell 1. The position and its construction shall be agreed in writing with the Waste Regulation Authority and the National Rivers Authority. These boreholes shall be purged prior to any samples being taken according to a method agreed in writing with the Waste Regulation Authority.

BACKGROUND MONITORING

19.2. Before any waste is deposited samples shall be taken in accordance with condition 19.1 at monthly intervals for a minimum of 3 months and analysed for those parameters described in condition 19.5.

19.3. In addition to the requirements of condition 19.2 at least one set of monthly samples shall be analysed for the parameters described in condition 19.7.

19.4. A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken and before any waste is deposited.

SUBSEQUENT MONITORING

19.5. Samples taken in accordance with condition 19.1 shall be analysed at monthly intervals for the following parameters:

i	pH	ii	Conductivity
iii	Dissolved Oxygen	iv	Chloride
v	Ammoniacal Nitrogen	vi	Water level

19.6. A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken.

19.7. In addition to those parameters listed in condition 19.5 the samples shall be analysed for the following parameters every 3 months:

vi	Cadmium	vii	Chromium
viii	Copper	ix	Lead

x	Manganese	xi	Nickel
xii	Zinc	xiii	Iron
xiv	Magnesium	xv	Calcium
xvi	Potassium	xvii	Sodium
xviii	Total Organic Carbon	xix	Total Oxidised Nitrogen
xx	Alkalinity*	xxi	Sulphates
xxii	Mercury		

*Total alkalinity as $CaCO_3$ at pH 4.5

19.8. A copy of the results obtained shall be forwarded to the Waste Regulation Authority within one month of the sample being taken.

19.9. The monitoring programme shall be agreed annually. The revised programme shall be agreed with the Waste Regulation Authority. In default of agreement being reached, monitoring shall be carried out as defined in writing by the Waste Regulation Authority.

20. Landfill Gas Monitoring

PROVISION OF MONITORING BOREHOLES

20.1. The 4 existing landfill gas monitoring boreholes shown in The Working Plan shall be maintained.

20.2. Prior to any deposit of waste 2 further boreholes shall be installed as shown in The Working Plan.

BACKGROUND MONITORING

20.3. Measurements of flammable gases, carbon dioxide and oxygen shall be made at all monitoring boreholes in accordance with 20.3.1 and 20.3.2 and 20.2.3 below.

20.3.1. The measurements shall be made weekly for a minimum of 4 weeks prior to any waste being deposited in cell 1 and 12 weeks prior to any waste being deposited in cells 2,3,4 and 5 in accordance with the statement of intent submitted as part of this application. Measurements shall only be discontinued if agreed in writing with the Waste Regulation Authority.

20.3.2. The measurement of gas concentrations shall be carried out by a method which shall be approved by the Waste Regulation Authority.

20.3.3. The measurement of gas concentrations shall be recorded and reported in writing to the Waste Regulation Authority within two weeks of the measurements being made and prior to any waste being deposited.

SUBSEQUENT MONITORING

20.4. Measurements of flammable gases, carbon dioxide and oxygen shall be made at all monitoring boreholes in accordance with 20.4.1 and 20.4.2 and 20.4.3 below.

20.4.1. The measurements shall be made monthly in accordance with the statement of intent submitted as part of this application. Measurements shall only be discontinued if agreed in writing with the Waste Regulation Authority.

20.4.2. The measurement of gas concentrations shall be carried out by a method which shall be approved by the Waste Regulation Authority.

20.4.3. The measurement of gas concentrations shall be recorded and reported in writing to the Waste Regulation Authority within two weeks of the measurements being made.

20.5. Concentration of Flammable Gases and Carbon Dioxide

20.5.1. The **trigger concentrations** shall be as follows:

i Flammable gases - 1% by volume

ii Carbon dioxide - 1.5% by volume above background levels

20.6. Concentrations in excess of trigger concentrations

20.6.1. If the measurements show that the concentration of **flammable gases** exceed the trigger concentration given in condition 20.5.1 above at any monitoring point outside the waste, **remedial measures** shall be undertaken in accordance with the scheme agreed under condition 20.7. below.

20.6.2. If the measurements show that the concentration of **carbon dioxide** exceeds the trigger concentration given in condition 20.5.1 above at any monitoring point outside the waste then a **programme of further monitoring** shall be agreed with the Waste Regulation Authority and implemented within 28 days.
Measurements shall only be discontinued if agreed in writing with the Waste Regulation Authority.

20.7. Remedial Measures

20.7.1. A scheme of remedial measures shall be agreed in writing with the Waste Regulation Authority. Such remedial measures shall include methods of venting gas from the site and procedures to be adopted should any building or structure be perceived to be at risk.

20.7.2. Remedial measures shall be implemented within 12 weeks of any measurement of:

20.7.2.1. Flammable gases being made which exceeds the trigger concentration given in condition 20.5.1 above,

20.7.2.2. Carbon dioxide being made which exceeds the trigger concentration given in condition 20.5.1 above unless a further period of monitoring has been agreed as described in condition 20.6.2. If a further period of monitoring has been agreed, remedial measures may be delayed until the results of such monitoring have been assessed.

20.7.3. Remedial measures must be undertaken until readings have fallen to below the trigger concentrations given in condition in 20.5.1 above at all monitoring points outside the waste and have remained below those concentrations over a 24 month period, measured on at least 4 separate occasions including 2 occasions when atmospheric pressure was falling and was below 1000mb. Remedial measures shall only be discontinued if agreed in writing with the Waste Regulation Authority.

21. Landfill Gas Management

21.1. Gas venting wells shall be installed in each cell as specified in the Working Plan and raised progressively during filling.

21.2. Horizontal gas drains leading to the gas venting wells shall be constructed within the fill of all the cells. These will be constructed from no-fines aggregate and rubble at five metre vertical intervals by excavation into the deposited waste. The gas drains will have a minimum thickness of 50 cm.

22. Method of Filling

22.1. The site shall be operated in cells as shown in The Working Plan and the direction of filling shall be as specified in the Working Plan.

22.2. No deposit shall take place in cell '3' until cell '1' has been restored.

22.3. No deposit shall take place in cell '4' until cell '2' has been temporarily capped.

23. Handling and Compaction of Waste

23.1. The site shall be equipped with suitable machinery to handle and compact wastes received at the site.

23.2. Machinery used for compaction and covering of wastes shall be either a tracked vehicle, steel wheeled compactor, or rubber tyred loading shovel.

23.3. Machinery shall be maintained in working order.

23.4. Any breakdown of machinery which results in failure to comply with any of the conditions of this licence shall be notified to the Waste Regulation Authority before the end of the working day on which the breakdown occurs.

24. **Handling Hard-Bonded Asbestos Products**

24.1. All hard-bonded asbestos products shall be deposited at the foot of the working face and covered by the end of the working day.

24.2. Hard-bonded asbestos products shall not be used for the construction or repair of site access roads or vehicle parks, or be handled or deposited on any part of the site such that they are subject to abrasion and release of fibres.

25. **Handling of Difficult Wastes**

All difficult waste or waste likely to be the source of odour shall be deposited at the foot of the working face and covered with other wastes immediately after deposit, so as not to be within one metre of the surface or flanks of the working area.

26. **Handling and Deposit of Clinical Waste**

26.1. No clinical waste is to be accepted for landfilling unless the Waste Regulation Authority have been prenotified of the intention to landfill at least two days before the waste is accepted.

26.1.1. The method of pre-notification shall be the full and accurate completion of a CW2 Form (supplied by the Waste Regulation Authority) and the furnishing of that form to the Waste Regulation Authority so as to arrive in the normal course of post (first class) not more than one month and not less than 2 clear days before the removal of the waste. (In calculating this period of days any Saturday, Sunday, Good Friday, Christmas Day, Bank Holiday or other public holiday shall be disregarded).

26.1.2. Condition 26.1 above does not apply to clinical waste which is delivered to the landfill site from a premises licensed for the keeping of clinical waste within Cumbria.

26.2. All clinical waste accepted at the site for landfill shall be in sealed yellow bags with a black band.

26.3. All clinical waste accepted at the site for landfill, shall be deposited at the foot of the working face and covered with other wastes immediately after deposit, so as not to be within one metre of the surface or flanks of the working area.

27. **Layering the Waste**

27.1. All waste (other than hard bonded asbestos waste, waste stored separately for use as cover, and difficult wastes handled in accordance with other Conditions of this licence) shall be compacted and formed into a layer by the use of machinery described above by:

27.1.1. being deposited on the surface behind the face, compacted, and pushed over the working face whilst being compacted, or

27.1.2. being deposited on the area below the face and formed into a compacted layer by being pushed upwards into the working face.

27.2. The depth of a layer of waste shall not exceed 2 metres.

27.3. The gradient of the face or flanks shall not exceed 1 in 3 by the end of the working day.

28. **Trees and shrubs**

No deposit of waste shall take place onto or against trees or shrubs. Before deposit of waste takes place in areas of the site where there are trees and shrubs, the trees and shrubs shall be cut down and removed to a suitably licensed facility.

29. **Crushing of Articles Likely to Cause Voids**

All large articles likely to cause voids shall be crushed, broken up, or flattened.

30. **Covering of Wastes**

30.1. All waste which does not fall within the category of inert material as defined in Condition 2.1.1.1 of this licence shall be compacted and covered by a minimum of 15 cm of inert material by the end of the working day.

30.2. Inert covering material shall, until used, be kept segregated from wastes to be covered.

31. **Site Tidying**

Any loose waste within the site boundary shall be collected at least once a week, or within any period as the Waste Regulation Authority may direct in writing if weekly is found to be insufficient. Loose waste collected in accordance with this condition shall be deposited at the base of the working face.

32. **Control of Litter**

Precautions shall be taken to ensure that waste which becomes wind blown is retained within the site perimeter. A method for the control of litter shall be agreed in writing with the Waste Regulation Authority and the County Planning Authority and be implemented before any waste is deposited.

33. **Fires**

No waste material shall be burned within the boundaries of the site and a fire at the site shall be regarded as an emergency and immediate action shall be taken to extinguish it. All outbreaks of fire shall be notified forthwith to the Waste Regulation Authority.

34. **Dust Suppression**

Site roads, incoming loads, and waste awaiting deposit shall be sprayed with water to suppress the emission of dust. Spraying shall be carried out whenever conditions are such that dust may cause a nuisance at or beyond the site boundary.

35. **Odours**

Odours shall be controlled by the removal of odorous waste.

36. **Pest Control**

Precautions shall be taken to deal effectively with any pests on the site. Pests shall include insects, rodents, birds and measures shall ensure that populations of all such pests are kept to a minimum.

37. **Deposits in Final Layer**

The final one metre layer of material deposited shall be kept free of materials which may interfere with final restoration or subsequent cultivation.

38. **Areas Awaiting Restoration**

Until final restoration, completed areas of landfilling shall be graded and maintained in a tidy condition and action shall be taken to control or destroy weeds.

39. **Restoration**

39.1. Restoration shall be carried out in accordance with the working plan.

39.2. Within 6 months, cells filled to final contours shall be capped with impermeable material by:

39.2.1. clay emplaced to the specification given in the document "Earthworks on Landfill Sites" written by the National Rivers Authority, North West Region

or

39.2.2. a method agreed in writing with the Waste Regulation Authority.

39.3. Any low spots or hollows in completed or temporary caps which may trap or hold water shall be filled and regraded.

40. Five Year Review

This licence will be reviewed every five years. A formal review meeting will be arranged between the site licence holder and the Waste Regulation Authority at which future proposals and required improvements shall be discussed.

40.1. The licence holder shall provide the Waste Regulation Authority with proposals for the development and operation of the site for the next five year period at least 4 weeks before the date of the formal review. The proposals shall take the form of a written statement and plans of any proposed developments.

40.2. The licence holder shall attend the review meeting as arranged.

41. Cessation Of Deposits

This licence permits the deposit of waste until the expiry date of 31 March 2002 of planning permission number 3/93/9006 unless further permissions for the same use are obtained. In the case of an extended planning permission or subsequent permissions being obtained the deposit of waste will only be permitted for the period specified by the planning permission.

NOTES EXPLAINING CONDITIONS

Note (1) Working Plan

The working plan, submitted as part of the application, should describe the operation of the site. Changes may be made only with the written agreement of the Waste Regulation Authority. Where possible, the Authority will deal with proposals for changes as quickly as possible, so as not to interfere with the efficient running of the site. In cases of urgency, this may be by verbal agreement, subject to written confirmation.

The agreement of the Waste Regulation Authority to amendments to the Working Plan does not confer any approval or consent which may be required under other legislation or controls. It remains the responsibility of the licence holder to ensure that all such necessary approvals are obtained before works are undertaken.

Note (2) Permitted Wastes

It is important to note that the types of waste permitted are defined in Section 75 of the Environmental Protection Act 1990, The Controlled Waste Regulations 1992 and Appendix 7c of Waste Management Paper Number 26. Operators should familiarise themselves and their staff with the meaning of these categories. In most cases accurate record keeping and monitoring can only be carried out based on information obtained from contractors or drivers delivering waste to the site.

Note (3) Reception of Waste

Any site receiving waste must be equipped to allow inspection of the waste. Responsibility for ensuring that unsuitable wastes are rejected or removed rests with the licence holder.

Note (4) Sampling of Wastes by the Waste Regulation Authority

The site will be inspected regularly by officers of the Waste Regulation Authority. Samples of solids, liquids or gases may be taken and analysed to ensure that the requirements of this licence are being met and that water, leachate and gas monitoring is being carried out correctly.

Note (5) Management and Supervision of the Site

The Waste Regulation Authority must be provided with the name of the person with management responsibility for the site, and must be notified if responsibility is transferred to another person.

The minimum number of operatives is that number required for normal day to day running of the site, and specialist staff may be required at other times to fulfil the conditions of this licence.

Reports on site visits will be forwarded to the nominated person with management responsibility.

The site operatives should be responsible for:

(i) *checking the nature and quantity of all wastes brought to the site.*

(ii) *ensuring that any waste to be deposited has been duly authorised by this licence.*

(iii) *ensuring the accurate completion and up to date maintenance of site records.*

(iv) ensuring that all vehicles using the site:

(a) report to the site control office
(b) are weighed in
(c) are directed to the appropriate designated tipping area on any given day

Note (6) Hours of Operation

Hours of operation of the site are specified to avoid nuisance to the public caused by work being carried out by vehicles travelling to and from the site in the evenings, or weekends.

Note (7) Record Keeping and Recording of Waste

Effective record keeping ensures that deliveries to the site are within the terms of the licence. The Waste Regulation Authority requires submission of details for statistical purposes and forward planning.

Note (8) Commencement/Temporary Cessation of Use

The Waste Regulation Authority need to know when a site is in use and when it is temporarily out of use to ensure compliance with the conditions of the licence.

Note (9) Site Office

A site office is required to enable record keeping to be carried out and must be capable of being used for this purpose effectively.

Note (10) Notice Board

A notice board is necessary to give the public information about the activity taking place, and who they may contact regarding it. NB: all site licences are required by law to be available for public inspection at the offices of the Waste Regulation Authority.

Note (11) Site Roads and Vehicle Cleaning

Site roads need to be provided so that vehicles can enter and leave the site easily and do not foul the highway. Where a suitable road is provided and adequately surfaced, the need for additional wheel cleaning facilities may be avoided. Sweeping the public highway after material has been deposited will not comply with the condition of the waste disposal licence.

Note (12) Fencing and Site Security

All sites need to be secured against unauthorised access by adequate fencing and lockable gates which can be secured whenever the site is unmanned and outside operating hours.

Note (13) Fuel Storage

Fuel storage areas need to be designed so as to prevent any pollution by spillage or escape of materials.

Note (14) Site Preparation

All sites taking anything other than purely inert waste need to be lined. This is so that any leachate produced is contained within the site and cannot pollute groundwater, or nearby water courses. The standard to which sites are required to be lined is regularly upgraded in line with new developments in lining materials and methods thereby ensuring maximum containment is achieved. The licence condition is written to take account of these changes and will ensure each cell is lined to the standard which is acceptable when that cell is developed.

Note (15) Leachate Management

The depth of leachate in monitoring chambers and wells indicate the depth of leachate within the site. A.O.D. means above ordnance datum, which is the height of a specified feature surveyed, relative to a fixed feature, determined as having a height of zero feet as determined by Ordnance Survey. Best landfill practice requires that the head of leachate should be kept as low as possible to minimise the risk of water pollution occurring. Rings of leachate collection chimneys are numbered on the inside because this is the easiest and most certain way of recording the depth of the chamber.

Note (16) Leachate Monitoring, Analysis and Records

The requirement for this monitoring and record keeping is in accordance with the recommendations of chapter 7.7 of the North West Waste Disposal Officers Leachate Management Report, November 1991.

Note (17) Surface Water Drainage

17.1 *Depositing waste in water, even if the waste is classified as inert, may lead to leachate production and is bad landfill practice.*

17.2 *Sites must be well drained so that they can be safely operated in wet weather. Whenever possible water should be prevented from draining onto a site where it may become polluted.*

Note (18 & 19) Water Monitoring

Where landfills are situated in a position which might pose a risk of pollution to a water course, the operator is required to monitor water quality regularly. Monitoring standing water and site drainage is necessary to ensure that no polluted water enters a watercourse. Water which is allowed to collect on disposal sites may sooner or later become polluted. This may happen even when a site is taking only inert waste. Conductivity measurements can give early indication of pollution occurring.

Note (20 & 21) Landfill Gas

Landfill gas is produced during biological breakdown of wastes in landfill. It may migrate from the site, and if not properly monitored and controlled it can give rise to flammability, toxicity, asphyxiation and explosive hazards. The steps required are in accordance with the Department of the Environment Waste Management Paper 27. The remedial measures which may be required could consist of passive venting, active venting or, in extreme cases, removal of deposited waste.

Note (22) Method of Filling

This method of operation is necessary to achieve progressive restoration. The site is divided into working areas called cells. Restoration and capping of completed cells minimise infiltration of rainfall and therefore leachate production, in addition to improving the appearance of the site.

Note (23) Handling and Compaction of Waste

The methods specified are in accordance with best landfill practice, as recommended in Waste Management Paper 26 published by the Department of the Environment.

Note (24) Handling of Hard Bonded Asbestos Waste

Whilst hard bonded asbestos products are not considered to be special waste, they still need to be handled in such a way as to not give rise to any fibres when they are deposited on site.

Note (25) Handling of Difficult and Noxious Wastes

All waste, difficult waste or waste likely to give rise to odour must be handled in such a way that it can be immediately covered with other waste.

Note (26) Clinical Waste

clinical wastes are defined in Chapter 3 of Waste Management Paper 25. Only waste in groups C,D and E of the following description shall be accepted;

Wastes in Group A

a) *Soiled surgical dressings, swabs and other contaminated waste arising from medical treatment.*

b) *Materials, other than linen, from cases of infectious disease.*

c) *All human tissue (whether infected of not), animal carcasses (arising from veterinary and similar premises) and tissues from laboratories, and all related swabs and dressings, and liquid clinical waste, (including for the purpose of this licence, blood).*

Wastes in Group B

Discarded syringes, needles, cartridges, broken glass and other sharp instruments.

Wastes in Group C

Laboratory and post mortem room waste other than waste included in Group A. (Including for the purposes of this licence, laboratory waste in the form of petri dishes and mortuary waste in the form of clothing).

Wastes in Group D

Only the following;

Pharmaceutical and chemical waste collected from pharmacies, chemists and similar premises. (please note that waste also defined as special waste in this catagory cannot be accepted at this site for example prescribed drugs).

Wastes in Group E

Used disposable bed-pan liners, urine containers, incontinence pads and stoma bags (including, for the purpose of this licence, treated sanitary towels and tampons).

Note (27) Layering of Waste

The layering and compacting of waste is in accordance with best landfill practice, as recommended in Waste Management Paper 26 published by the Department of the Environment. The handling of waste in this manner minimises leachate production, discourages infestation by pests, prevents accumulation of landfill gas in voids and reduces the visual impact of the operation . It also leads to greater utilisation of the available void space.

Note (29) Crushing of Large Articles

Large articles may give rise to voids within the landfill therefore in accordance with best landfill practice items are required to be crushed. Voids in the landfill encourage infestation by pests and landfill gas may accumulate in them.

Note (30) Covering of Waste

The covering of combustible or putrescible wastes deposited on a site is in accordance with best landfill practice. The covering of waste discourages infestation by pests, minimises odours and leachate production and reduces the visual impact of the operation.

Note (31) Site Tidying

All sites should be tidied at the intervals indicated to collect any waste which has been blown away from the working area, or may have fallen off vehicles. A tidy site discourages infestation by pests and reduces the visual impact of the operation.

Note (32) Control of Litter

Litter should be controlled so as to prevent it leaving the site by the use of efficient working methods, and the provision, if necessary of litter screens or netting. The collection of litter from outside the site boundary will not be interpreted as compliance with licence conditions.

Note (33) Fires

Fires are not allowed on site. If waste is deposited whilst there is a fire at the site, then it shall be considered that the fire is not being treated as an emergency.

Note (34) Dust Suppression

Whether or not dust is likely to cause a nuisance at the site boundary is a matter requiring inspection and judgement. However, spraying to control dust is desirable to protect employees at the site, and visiting personnel.

Note (35) Odours

Odours are more likely to be a nuisance than a health hazard but removal of the odorous waste is advisable in circumstances where the odour becomes acute.

Note (36) Pest Control

All sites will require inspection for signs of vermin and pests, and a company or Authority qualified to deal with such matters must be called in if required.

Note (37) Deposits in the Final Layer

The final layer shall be controlled as described in the interests of proper restoration of the site.

Note (38) Areas Awaiting Restoration

Areas filled to final level awaiting final soiling and grading should be kept tidy as described.

Note (39) Restoration

The primary aim of capping is to control and minimise leachate generation by minimising water ingress into the landfill. This is achieved by installing a low permeability cap over the whole site.

Note (40) Five Year Review

All site licences need to be reviewed on a regular basis to ensure that operations are being undertaken in accordance with current standards. Guidance from the Department of the Environment suggests that licence conditions are reviewed every 5 years.

Note (41) Cessation of Deposits

The deposit of waste on site can only occur whilst planning permission is in force. Whilst the site can not accept waste after the stipulated time period unless the planning permission is renewed, other licence conditions are still enforceable. Of particular importance are those conditions relating to landfill gas and water monitoring. Monitoring of the site should continue to ensure there is no water pollution or danger to public health.