



SANDWELL METROPOLITAN BOROUGH

CONTROL OF POLLUTION ACT 1974

LICENCE TO DISPOSE OF WASTE

The Metropolitan Borough of Sandwell in pursuance of the powers conferred by the Control of Pollution Act 1974, hereby license Mintworth Quays Ltd, Randalls Bridge, Coneygre Road, Tipton (hereinafter called the "licence holder") to operate a landfill site on land at Rattlechain, Tividale, Tipton, which is shown edged red on the drawing attached to this licence, being land occupied by the licence holder.

This licence is granted subject to the conditions set out in the schedules attached hereto.

Dated this 23rd day of November 19 92

Signed
Director of Environmental and Consumer Protection

The licence holder's attention is drawn to the notes overleaf.

NOTES

These notes are for general guidance only and they do not constitute an authoritative statement of the law.

This licence permits the deposit of certain wastes under controlled conditions and is not intended to permit the sorting, storing, transfer or treatment of any waste except to the extent expressly referred to in Schedule A.

Definitions of certain words used in this licence are to be found in Schedule C of this licence.

This licence relates only to the requirements of the Control of Pollution Act 1974 for the deposit of waste and the use of plant or equipment subject to the conditions set out in the Schedules and does not constitute a consent required by any other legislation. In particular it is the responsibility of the licence holder to comply with any requirements of the Health and Safety At Work etc Act 1974, the Radioactive Substances Act 1960, the Town and Country Planning Acts, and all relevant water protection and environmental health legislation.

If the licence holder ceases to occupy the land specified above, then he may transfer the licence to the new occupier after giving notice to the Waste Disposal Authority who has the right to decline to accept the new licence holder.

If the licence holder wishes to cancel this licence, he must return it to the Waste Disposal Authority together with a notice stating he no longer requires the licence. Cancellation of the licence will not affect any outstanding liability of the licence holder under the conditions of the licence.

Contravention of Licence Conditions

Your attention is drawn to the provisions of Sections 3, 9 and 16 of the Control of Pollution Act 1974.

Section 3

Prohibits under penalty the deposit of waste, or the use of plant or equipment, otherwise than in accordance with the terms of a licence. This Section applies to all the conditions contained herein, including any which may be the subject of appeal to the Secretary of State under Section 10 of the Act.

Any deposit which takes place without compliance with all the licence conditions may lead to prosecution under this Section. A person who contravenes Section 3 subsection (1) shall, subject to subsection (4), be guilty of an offence and liable on summary conviction to a fine of an amount not exceeding £2,000 (at the date of issue of this licence), or on conviction on indictment to imprisonment for a term not exceeding two years or a fine or both.

Section 9

Non compliance with any licence conditions may lead to the revocation of this licence.

Section 16

The licensing authority is empowered to require the removal of any controlled waste deposited in circumstances where any of the conditions contained in this licence are not being complied with, or the undertaking of such works as are required to reduce or eliminate the consequences of such deposits.

Conditions for Landfill Site at:-

Rattlechain
Tividale
Tipton

Licence Holder:-

Mintworth Quays Ltd
Randalls Bridge
Coneygre Road
Tipton

Licence No:-

SL 947

Schedule A

- 1.(a) The statement of intended methods of operation and drawings contained within the document entitled "Application for Engineering Operations and the Reclamation of Land at Duport's Tip and the former Tividale Sewage Works", dated 17th August 1992, submitted as part of the application for this licence shall be referred to as the working plan.
- (b) No operations shall take place until the working plan has been approved in writing by the Waste Disposal Authority ('the WDA'). The licence holder shall obtain written approval from the WDA for any proposed change in the actual conduct of the operations from the proposals approved in the working plan, as altered by any previous changes approved by the WDA, before such change is implemented.
- (c) Any reference in this licence to the working plan shall include a reference to any changes to the statement or the drawings which have been approved in writing by the WDA.
- (d) Subject to the terms of this licence, the site shall be operated in accordance with the working plan.
2. The deposition of waste on site shall cease on or before 3rd April 1995.
- 3.(a) The types of waste imported onto the site shall consist only of the following:
 - i) Foundry sand from the operator's own stockpiles or directly from the source of production.
 - ii) Brick and building/demolition rubble delivered directly from the source of production.
 - iii) Excavated natural granular materials.
 - iv) Top soil and Sub soil.
- (b) Notwithstanding Condition 3(a) solid wastes only shall be accepted and these wastes shall not contain any hazardous quantity or concentration of any poisonous, noxious or polluting substance. No waste liquids or sludges or articles containing any waste liquids or sludges or any plasterboard or biodegradable waste shall be brought onto the site.

- (c) Sources of foundry sand to be accepted at the site shall have been previously agreed with the WDA. The maximum concentration of total phenol shall not exceed 5mg/kg and 1mg/kg leachable phenol from any approved source.
- (d) No asbestos in any form shall be accepted on site.
- (e) The total quantity of waste accepted at the site in any one day shall not exceed 6,000 tonnes.
- (f) Wastes shall only be imported onto the site for the purposes of reclamation of the site and any waste material imported in accordance with Condition 3(a) shall not be subsequently removed from the site.
- (g) Provision shall be made as detailed in the working plan for any unacceptable waste inadvertently delivered to or left at the site. Such waste shall be segregated and removed from the site as soon as practicable, and in any case within one working day of receipt and taken to a suitable alternative licensed facility for disposal. The WDA shall be informed forthwith of any such occurrence and this shall be confirmed in writing within 3 working days.
- 4.(a) Wastes deposited on the site shall consist only of those permitted by Condition 3 and sewage sludge and other materials excavated during the reclamation of the sewage works.
- (b) The deposit of wastes shall only take place at the locations and in the manner detailed in the working plan.
- (c) Prior to the infilling of any part of the former sewage works any vegetation within the area to be infilled shall be removed and either removed from the site or deposited on the Duports site.
5. Operations at the site shall only take place between the hours of:
- | | |
|----------------------|-------------|
| - Mondays to Fridays | 0700 - 1800 |
| - Saturdays | 0800 - 1300 |
- Except in circumstances of emergency no deposit of wastes or other operations, shall take place outside these hours or on Sundays, Bank Holidays, Christmas Day, Good Friday or other public holidays. All circumstances of emergency shall be reported forthwith to the WDA and confirmed in writing within 3 working days.
6. During the hours of darkness as defined by the Science and Engineering Research Council, operations at the site shall only take place when lighting as detailed in the working plan is in use. This shall include the use of mobile lighting in all working areas.
7. Prior to the commencement of operations gates and fencing shall be provided as detailed in the working plan. The gates shall be locked outside operating hours and when the site is unattended and all reasonable precautions shall be taken to prevent unauthorised access and/or the unlawful deposit of waste. Fencing shall be inspected each working day and any repairs that are required shall be completed as soon as practicable and in any case within 24 hours of identification.

8. An identification board of durable material and finish shall be permanently displayed at the entrance to the facility. This shall give the name of the site; the hours of operation; the name, address and telephone number of the operator and of the WDA and a telephone number through which a responsible person may be contacted in the event of an emergency occurring when the site is unattended.
9. The site when operating shall be manned and supervised as detailed in the working plan. Supervisors must be able to identify the general categories of waste allowed by this licence, capable of ensuring compliance with this licence, and be fully conversant with unloading/loading and operational procedures and trained to implement emergency procedures.
10. Provision shall be made within the confines of the site for the parking, loading and unloading of vehicles using the site. Queuing facilities shall be provided within the site so that vehicles do not queue upon the public highway.
11. Only liquids used for the operation and maintenance of equipment and facilities shall be stored at the site. Tanks or drums used for the storage of such liquids shall be of a type and construction suitable for the liquids they contain, labelled to show their contents and be stored within an impermeably bunded compound. They shall conform, where necessary, to all relevant safety and construction standards. The bunded compound must have an available capacity of at least 110% of the volume of the largest drum or tank being stored within the compound. Rainwater shall not be allowed to accumulate and spillages shall be removed forthwith.
12. Incoming waste shall be checked and recorded as detailed in the working plan.
13. A site control office shall be provided at the site which shall be equipped with the following:
 - i) a telephone, which shall be maintained in working order;
 - ii) facilities for recording the types and quantities of waste entering the site.
14. Wheel cleaning facilities shall be provided, maintained and used to prevent mud or other debris being deposited on the public highway.
15. (a) Sewage sludge excavated during the reclamation of the sewage works shall be deposited only on the existing Duport's site. Sewage sludge shall be laid and formed into a thin layer and shall be covered progressively with suitable inert stabilised material throughout operating hours, so that by the end of each working day all exposed surfaces including the working flanks and face shall be covered to a depth of at least 150mm.

(b) Notwithstanding Condition 23 no sewage sludge shall be transferred within the site unless there is a stockpile of inert material located in the vicinity of the tipping area which is sufficient to cover such wastes by the end of the working day.

- (c) Previously deposited sewage sludge shall only be exposed during active excavation operations. Any exposed biodegradable or odorous material shall be covered by a layer of inert material to a minimum thickness of 150mm by the end of each working day.
16. The width of the working face in any area where sewage sludge or other biodegradable or odorous material is being excavated or deposited shall not exceed 40 metres and the maximum height of any working face shall not exceed 2.5m.
17. Each layer of waste and covering material shall be laid to encourage surface water runoff from tipping areas.
18. Before covering, working faces and flanks shall be compacted to form gradients not steeper than 1:3.
- 19.(a) A gas barrier shall be installed at the location shown in drawing No. 4B (Revision B) and constructed as detailed in drawing No 6 in the working plan to a depth of at least 1 metre into natural marl below the level of tipped fill and to the timescale detailed in the working plan.
- (b) The present screening bund shall be progressively removed and relocated as detailed in drawing SK MIN2/TRH/27.07 92-2 in the working plan, in sections no greater than 20 metres or larger sections if agreed in writing by the WDA. Upon completion of the gas barrier in any particular section, a new screening bund shall be constructed using imported waste. The screening bund shall subsequently be contoured to conform with drawing No 3 (Revision C) in the working plan.
- 20.(a) Landfill gas monitoring boreholes shall be provided and constructed as detailed in the working plan and located as shown in Drawing No. 4B (Revision B). Boreholes shall be constructed to a depth of at least five metres deeper than the lowest point of the waste within the site.
- (b) Any boreholes which become flooded, buried, lost, damaged by subsidence or otherwise rendered unusable shall be reinstated forthwith by the licence holder.
- 21.(a) Prior to the deposit of any waste within the site these boreholes shall be monitored for methane, carbon dioxide and oxygen on at least 12 separate occasions over a period of 3 months. The gas pressure within each borehole shall also be recorded together with the barometric pressure at the time of monitoring.
- (b) On completion of the background monitoring required by Condition 21(a) and prior to the deposit of any waste at the site trigger levels for methane and carbon dioxide shall be agreed with the WDA.
- (c) As operations proceed, routine monitoring of these boreholes for methane, carbon dioxide and oxygen shall be carried out on a weekly basis or at any other frequency specified by the WDA. The gas pressure within each borehole shall also be recorded together with the barometric pressure at the time of monitoring.
- (d) If at any time during subsequent monitoring the gas level in any monitoring borehole is found to exceed the trigger levels established in accordance with Condition 21(b) then the licence holder shall furnish details of additional gas control measures to the WDA.

- (e) If, in the opinion of the WDA, the further gas control measures proposed are inadequate, additional information as required by the WDA shall be submitted by the licence holder.
 - (f) If, one month after additional information has been requested by the WDA in accordance with Condition 21(d), the WDA is of the opinion that adequate proposals have not been submitted, then all operations shall cease until such time as satisfactory proposals have been submitted to and approved by the WDA.
 - (g) Once approved by the WDA the additional gas control measures shall be implemented forthwith.
 - (h) The results of all monitoring shall be forwarded to the WDA as soon as practicable and in any case within one month of monitoring.
22. Three gas venting chimneys shall be installed and constructed as detailed in drawing No. 5 in the working plan and they shall be located at the high points within the site as shown on drawing No 4B (Revision B). Chimneys shall be constructed of single sized, no fines, clean aggregate.
- (23) No material other than soil/subsoil, concrete/brick and clay shall be stockpiled on the site. Materials stored on the site shall only be stored in the manner and at the locations detailed in drawing No 4A (Revision C) in the working plan.
24. On completion of tipping the Duports site shall be covered with at least 0.5m of single size, no fines, clean aggregate. This shall be sealed with at least 0.5m of compacted clay keyed into the surrounding marl ridges as detailed in the working plan. The clay shall be sampled, checked, tested, analysed and emplaced as detailed in Schedule B of this licence.
25. The clay cap when emplaced shall have a maximum permeability of 1×10^{-9} m/sec.
- 26.(a) A system for the collection, settlement and discharge of surface water shall be installed, maintained and used as detailed in the working plan.
- (b) A leachate monitoring well shall be installed as soon as practicable and located and constructed within the waste as detailed in the working plan to a depth of not less than 128.0m AOD.
 - (c) If at any time the leachate monitoring well becomes unusable it shall be reinstated forthwith by the licence holder.
 - (d) All discharges to watercourse shall have been previously agreed with the National Rivers Authority. Any discharge to sewer shall have been previously agreed with Severn Trent Water Limited.

27.(a) Routine sampling of leachate shall be carried out on a three monthly basis or at any other frequency specified by the WDA. Leachate samples shall be analysed for:

- i) pH
- ii) Conductivity
- iii) Ammoniacal Nitrogen
- iv) COD
- v) TOC
- vi) Phenols
- vii) Metals: Cd, Ni, Cu, Pb, Mn, Cr, Ca, Na, K, Zn.
- viii) Cyanide
- ix) Chloride

Results shall be forwarded to the WDA as soon as practicable after monitoring.

(b) The level of leachate (AOD level) within the leachate monitoring well shall be recorded on a monthly basis and the records shall be forwarded to the WDA on a quarterly basis.

(c) If the level of leachate exceeds 128.5m AOD then pumping of leachate shall be commenced forthwith and shall continue until the level of leachate within the monitoring well is not more than 128.5m AOD. The WDA shall be informed forthwith and this shall be confirmed in writing within 3 working days.

28.(a) A groundwater monitoring borehole shall be installed to a depth of 5m below the water table and maintained between the site and the River Tame at the location shown on drawing No.4B (revision B). The borehole log and all the details of the installation shall be submitted to the WDA upon completion of the borehole.

(b) Routine sampling of ground water from this borehole shall be carried out on a biannual basis or at any other frequency specified by the WDA. Samples shall be analysed for:

- i) pH
- ii) Conductivity
- iii) Ammoniacal Nitrogen
- iv) Phenols
- v) Chloride
- vi) COD
- vii) TOC
- viii) Metals: Cd, Ni, Cu, Pb, Mn, Cr, Ca, Na, K, Zn
- ix) Cyanide

Results shall be forwarded to the WDA as soon as practicable after monitoring.

(c) The ground water level (AOD level) within the borehole shall be recorded on a monthly basis and the results shall be forwarded to the WDA on a quarterly basis.

(d) If the groundwater monitoring borehole detailed in Condition 28(a) becomes buried, lost, damaged or otherwise rendered unusable it shall be reinstated forthwith by the licence holder.

29. In order to protect the 3 gas vents within the site no vehicle shall operate within 1 metre, horizontally, of each vent.
30. The site shall be inspected each working day for the presence of vermin and insects, and control measures shall be taken to deal effectively with any vermin or insects found. Records of these inspections and any control measures undertaken, including pesticides used, shall be kept permanently on site.
31. Measures shall be taken as detailed in the working plan to suppress dust and odours arising from any area of the site.
32. Measures, including proper maintenance and use, shall be undertaken to control the noise of machinery and vehicles operating at the site as detailed in the working plan.
33.
 - (a) No material shall be burnt 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.
 - (b) All outbreaks of fire shall be notified forthwith to the Fire Service and the WDA.
 - (c) Fire fighting equipment shall be provided as detailed in the working plan.
34. If the WDA so directs, the licence holder shall take samples of waste deposited and keep such samples for such periods as the WDA may direct for examination by or on behalf of any person authorised by the WDA to do so.
35.
 - (a) Final restoration, to the contours shown on Drawing No. 3 (Revision C) shall be carried out as detailed in the working plan. This shall include the requirements of conditions 24 and 25 of this licence.
 - (b) The clay cap shall be covered with at least 0.75m of subsoil and 0.25m of topsoil to prevent desiccation, penetration of roots or erosion of any restoration material.
 - (c) Exposed areas of capping shall be inspected weekly and areas of capping that have been covered with subsoil and topsoil shall be inspected monthly. Any evidence that any restoration material has been compromised shall be investigated and any faults rectified as soon as practicable. During restoration, areas which have been capped shall be inspected each working day.
 - (d) No material shall be deposited above the levels shown on Drawing No. 3 (Revision C).
36. The costs of all monitoring, sampling and analysis required by virtue of this licence shall be borne by the licence holder. All analysis shall be carried out by an accredited laboratory (NAMAS).
37. All samples and records required to be kept by virtue of this licence shall be kept securely at the site for the period stated and they shall be made available to representatives of the WDA at any reasonable time.

38. Records shall be kept of the types and quantities of wastes delivered to the site. These records shall comprise of full details as required on forms supplied by the WDA and copies shall be sent to the WDA once per month or at any other frequency specified by the WDA. These records shall be made available to any representative of the WDA for inspection at the site at any reasonable time.
39. Provision shall be made to allow safe access to all areas of the site at all reasonable times for representatives of the WDA for the purpose of monitoring conditions at the site.
40. The terms of the licence and the approved working plan and any amendments to either document shall be made known to any persons who are given responsibility for the operation, management or control of the site and a copy of these documents shall be made available at the site at all times.
41. Any cessation of operations for a period in excess of 3 months shall be notified to the WDA. Not less than 14 days notice shall be given to the WDA of the date on which operations are to recommence in the event of a temporary cessation for a period in excess of 3 months.
42. A copy of any notice or instruction received in respect of the site from any authority other than the WDA, which in any way relates to the use of the site, shall be given to the WDA within three days.

Schedule B

Specification for clay capping of the site.

1. In this schedule the capping of the site referred to in Condition 24 of Schedule A shall be referred to as the seal and sealing material shall be construed accordingly.
- 2.(a) The sealing material to be used at the site shall be from sources approved by the WDA. Representative samples of this material shall be tested in a soils laboratory approved by the WDA to ensure that it is capable of being compacted by the equipment to be used for such purpose so as to achieve a permeability of not more than 1×10^{-9} m/sec. The number and distribution of the sample locations shall be agreed with the WDA. The WDA may at any time require a source to be re-tested for the full range of tests as detailed in this Schedule.
 - (b) The density/moisture content relationship of the material shall be determined in accordance with BS 1377 Part 4: Test 3.3. The appropriate size of hammer (2.5kg or 4.5kg) shall be selected to reflect the actual compaction equipment it is proposed to use on site. Where there is any uncertainty regarding the type of plant both tests shall be carried out.
 - (c) The permeability of the recompacted sample (required for the tests detailed in paragraph 2(b)) shall be measured by the falling head method for moisture contents of P% and (P + 5)% where P is the optimum moisture content and where P is determined according to BS 1377: Part 4: Test 3.

- (d) The natural moisture content and Atterberg Limits (liquid limit and plastic limit) of each sample shall be measured in accordance with BS 1377: Part 2: Test Method 3, 4 and 5: 1990. The particle size distribution shall be determined by BS 1377 : Part 2 : Test 9.
- (e) In respect of each prospective source of sealing material, a report containing the results of all laboratory tests shall be submitted to the WDA for approval before emplacement proceeds. The report shall state the minimum moisture content to be achieved during the emplacement of the material; the equipment to be used for its emplacement, the maximum thickness of each layer and the minimum number of passes of such equipment per layer. The compaction equipment shall be selected by the operator to ensure that the specified permeability will be achieved. The report will also include a plan delineating the source and showing clearly sample locations.
- (f) No sealing shall take place until the WDA has received the report referred to above and has agreed that sealing may commence.
- (g) Material to be recompacted to form the seal will only be accepted as suitable when the testing programme demonstrates that it is capable of achieving a permeability of not greater than 1.0×10^{-9} m/sec. The material shall have a minimum clay content (particle size less than 0.002mm) of 10%. The liquid limit shall not exceed 90% and the Plasticity Index shall not exceed 65%.
3. The emplacement of the sealing material shall at each and every stage of the operation be supervised by a suitably qualified independent chartered civil engineer or such other suitably qualified and experienced person, competent to supervise the capping works required by this licence to achieve a permeability of not greater than 1.0×10^{-9} m/sec. Details of the qualifications and experience of the engineer(s) chosen to supervise the capping works shall be sent to the WDA prior to these works being undertaken. Upon completion of works the engineer shall certify that all works have been carried out correctly in accordance with all specifications of this licence.
4. The following unsuitable materials shall be excluded from the seal:
- i) material from swamps, marshes and bogs
 - ii) peat, logs, stumps and perishable material
 - iii) material susceptible to spontaneous combustion
 - iv) material in a frozen condition
 - v) any industrial, commercial or domestic waste
 - vi) rocks, concrete or boulders having a volume greater than 0.05m^3
 - vii) other materials which may be defined by the WDA.
- 5.(a) The material, when placed, shall be compacted within the specified moisture content range as detailed in the working plan and method statement referred to in condition 2(e) of this Schedule.

- (b) If the material to be placed is in, or reaches, a condition such that it cannot be compacted in accordance with Condition 5(a) the licence holder shall either:
- i) make good by removing the material until it is in a suitable condition for re-use and replacing it with suitable material;
 - ii) make good the material by wetting or drying;
 - iii) cease work on the material until its physical condition is such that it can again be compacted in accordance with the specification; or
 - iv) make good areas of over-compaction, such as rutting.
- 6.(a) The material shall be placed in a series of thin layers and repeatedly tracked using the agreed compaction equipment. The maximum thickness of each layer and the minimum number of passes shall be as specified in the Department of Transport Specification for Road and Bridgeworks (5th Edition), Table 6/2 and its associated definitions and requirements, and shall be included in the report specified in condition 2(e) of this Schedule.
- (b) Variations from the methods given in Table 6/2 or the use of plant not included therein will be permitted only if the licence holder demonstrates to the WDA by site trials that an adequate state of compaction is achieved by the alternative method or equipment.
- 7.(a) The following quality control tests shall be carried out on the placed material:
- i) In-Situ Density - BS 1377: Part 9: Test 2
 - ii) Moisture Content - BS 1377: Part 2: Test 3
 - iii) Classification Tests - BS 1377: Part 2: Test 4, 5 and 9
 - iv) Depth Profiling - Either by auguring or by levelling surveys before and after the earthworks.
- (b) The above tests shall be carried out on a regular grid pattern across the emplaced material at intervals specified by the WDA. The WDA may amend the sampling regime at any time.
- (c) Any disturbance of the emplaced material caused by sampling or testing shall be rectified by backfilling with grout, clay or bentonite so as to ensure the integrity of the seal.
- (d) Should the tests specified in paragraph 7(a) identify areas where the material differs in terms of its Atterberg Limits significantly from those determined under Condition 2 of this Schedule, if it has a clay content of less than 10% or where it falls outside the acceptable density/moisture content ranges the licence holder shall take undisturbed samples for falling head permeability measurement in the laboratory. In the event of these permeability measurements exceeding 1.0×10^{-9} m/sec, or if there are any discontinuities apparent on the surface of the seal (fissures, cracks or slip planes) the suspect area shall be excavated, relaid and tested as detailed in paragraph 7(a).

- (e) The results of all quality control tests and a plan showing all the sample locations shall be submitted to the WDA on a monthly basis or at any other frequency specified by the WDA and shall be available at any reasonable time on site. All results shall be certified by the supervising engineer as to the correctness of sampling, testing and the veracity of submitted results and details.

Schedule C

1. In this licence an emergency is defined as a case where a person has reasonable cause to believe that circumstances exist which are likely to endanger life or health or cause damage to property or pollution of water.
2. In this licence, a quantity or concentration of any substance contained in any waste is regarded to be hazardous if that substance is present in that waste in such a quantity or concentration as to subject persons or animals to material risk of death, injury or impairment of health, or as to threaten the pollution or contamination (whether on the surface or underground) of any water supply.
3. In this licence, "landfill gas" means gas having the characteristics of gas produced at landfill sites.
4. Any drawing number referred to in this licence shall relate to the latest approved revision, indicated by letter suffix, contained within the working plan.
5. A representative of the WDA shall include an officer of the Environmental and Consumer Protection Department and an officer of the West Midlands Hazardous Waste Unit.
6. In this licence any references to BS 1377 refers to BS 1377 : 1990 version.