

FOR PLANNING AND ENVIRONMENT

CONTROL OF POLLUTION ACT 1974

B.P. OIL LLANDARCY REFINERY LIMITED

CRYMLYN TIP SPECIAL WASTE DISPOSAL LICENCE

A Waste Disposal Licence was first issued to the operator of the above site in July 1977. However, considerable advances have since been made in landfill technology and regulatory arrangements and it is therefore now necessary to update the licence and its associated working plan.

The modifications proposed are incorporated into the consolidated licence shown below:

SCHEDULE B - SITE INFRASTRUCTURE

1. Perimeter fencing and gates shall be maintained at all times in accordance with the working plan. The gates shall be securely locked at all times when the facility is unattended. Any damage to the gates and fencing which impairs their effectiveness will be repaired by the end of the working day and if this cannot be accomplished the licence holder shall provide security personnel to guard the facility until such repair is affected.
2. An identification board of durable material and finish shall be displayed at the entrance to the facility at the location specified in the working plan. This shall give the names and addresses of the site, and site operator together with an emergency contact telephone number.
3. A site control office of the type specified in the working plan shall be provided at the location specified in the working plan. The site control office shall be maintained to the original standard as specified in the working plan.
4. All site roads shall be maintained to the original standard as specified in the working plan.
5. Provisions for the storage of plant shall be in accordance with the working plan.
6. Storage containers for liquids shall be of a type and construction suitable for the liquids which they contain and labelled to show their contents. They shall conform, where necessary, to all relevant safety and construction standards and shall be installed at a location and to specification in accordance with the working plan. The containers shall be maintained to the original standard as specified in the working plan.



FOR PLANNING AND ENVIRONMENT

CONTROL OF POLLUTION ACT 1974

B.P. OIL LLANDARCY REFINERY LIMITED

CRYMLYN TIP SPECIAL WASTE DISPOSAL LICENCE

A Waste Disposal Licence was first issued to the operator of the above site in July 1977. However, considerable advances have since been made in landfill technology and regulatory arrangements and it is therefore now necessary to update the licence and its associated working plan.

The modifications proposed are incorporated into the consolidated licence shown below:

SCHEDULE B - SITE INFRASTRUCTURE

1. Perimeter fencing and gates shall be maintained at all times in accordance with the working plan. The gates shall be securely locked at all times when the facility is unattended. Any damage to the gates and fencing which impairs their effectiveness will be repaired by the end of the working day and if this cannot be accomplished the licence holder shall provide security personnel to guard the facility until such repair is affected.
2. An identification board of durable material and finish shall be displayed at the entrance to the facility at the location specified in the working plan. This shall give the names and addresses of the site, and site operator together with an emergency contact telephone number.
3. A site control office of the type specified in the working plan shall be provided at the location specified in the working plan. The site control office shall be maintained to the original standard as specified in the working plan.
4. All site roads shall be maintained to the original standard as specified in the working plan.
5. Provisions for the storage of plant shall be in accordance with the working plan.
6. Storage containers for liquids shall be of a type and construction suitable for the liquids which they contain and labelled to show their contents. They shall conform, where necessary, to all relevant safety and construction standards and shall be installed at a location and to specification in accordance with the working plan. The containers shall be maintained to the original standard as specified in the working plan.

7. A Site Surface water collection system shall be provided within six months of the issue of this licence.
8. Within six months of the completion of phase two of the hydrogeological survey (as required by condition E1) a leachate Management system shall be introduced in order to protect ground and surface waters.

#### Emergency Plan

9. The emergency plan (as shown in section 8 of the working plan) shall be reviewed at six monthly intervals and it shall also be updated whenever necessary to take account of changes in personnel or other circumstances. The updated emergency plan shall be forwarded forthwith to the Waste Disposal Authority.
10. Further tipping of the substances listed in condition C2. (other than asbestos or inert materials) shall only be permitted on a containment basis, in a manner to be approved by the Waste Disposal Authority.

#### SCHEDULE C TYPES OF WASTE

1. Notwithstanding the generality of the types of waste specified in this Schedule the following wastes shall be specifically excluded from delivery to the facility without the prior written approval of the Waste Disposal Authority.
  - a) Substances within the Control of Radioactive Substances Act, 1960 and any subsequent amendments.
  - b) Percussives and explosives and other substances with similar characteristics, excepting where such waste are in such a form or state where the percussive or explosive properties are and will remain ineffective.
  - c) Any materials capable of producing List 1 Substances (in terms of EC directives 80/68/EEC and 76/464/EEC).

7. A Site Surface water collection system shall be provided within six months of the issue of this licence.
8. Within six months of the completion of phase two of the hydrogeological survey (as required by condition E1) a leachate Management system shall be introduced in order to protect ground and surface waters.

#### Emergency Plan

9. The emergency plan (as shown in section 8 of the working plan) shall be reviewed at six monthly intervals and it shall also be updated whenever necessary to take account of changes in personnel or other circumstances. The updated emergency plan shall be forwarded forthwith to the Waste Disposal Authority.
10. Further tipping of the substances listed in condition C2. (other than asbestos or inert materials) shall only be permitted on a containment basis, in a manner to be approved by the Waste Disposal Authority.

#### SCHEDULE C TYPES OF WASTE

1. Notwithstanding the generality of the types of waste specified in this Schedule the following wastes shall be specifically excluded from delivery to the facility without the prior written approval of the Waste Disposal Authority.
  - a) Substances within the Control of Radioactive Substances Act, 1960 and any subsequent amendments.
  - b) Percussives and explosives and other substances with similar characteristics, excepting where such waste are in such a form or state where the percussive or explosive properties are and will remain ineffective.
  - c) Any materials capable of producing List 1 Substances (in terms of EC directives 80/68/EEC and 76/464/EEC).

2. Only the following types of waste shall be accepted at the site, and in quantities not exceeding the figures stated below:-

<u>WASTE TYPE</u>	<u>TONNES PER YEAR</u>
Pyrophoric Material	100
Vanadium Contaminated Material	200
Asbestos Contaminated Material	100
Oil Sludges	200
Bitumens and Waxes	100
Substantially Oil Free Non-Special Waste	1500

2. Only the following types of waste shall be accepted at the site, and in quantities not exceeding the figures stated below:-

<u>WASTE TYPE</u>	<u>TONNES PER YEAR</u>
Pyrophoric Material	100
Vanadium Contaminated Material	200
Asbestos Contaminated Material	100
Oil Sludges	200
Bitumens and Waxes	100
Substantially Oil Free Non-Special Waste	1500

#### SCHEDULE D - OPERATIONS

1. The licence holder shall notify the Waste Disposal Authority of any change in the actual conduct of operations, (from the proposals shown in the working plan and disposal licence), at least one month before the proposed change is implemented. Such changes as are agreed shall be placed in the licence that shall be amended appropriately. All operations shall be carried out in accordance with the working plan and agreed amendments.
2. The types of wastes accepted at the facility shall consist only of those specified in Schedule C of this licence. All wastes shall be visually inspected to ensure that they conform with the requirements of Schedule C of this licence. Any wastes not conforming to the requirements of Schedule C shall be rejected as unsuitable for disposal at the facility.
3. Records shall be kept of the dates of deposition and the types and quantities of each of the above wastes deposited at the site, together with the form of containment where applicable. Copies of such records shall be made available to the Disposal Authority and Summaries of this data are to be forwarded by 1st February and 1st August each year.
4. Normal site opening hours shall be between the hours of 13.30 and 15.30 on Tuesdays and Thursday only. However, in the event of an emergency (or other special circumstances), the site may be opened at other times given the prior information of the Disposal Authority.
5. Supervision of the site during working hours shall be the duty of the of the Protective Services Team under the direction of the Total Quality Engineer (Environment). Any changes of these responsibilities shall be communicated to the Disposal Authority.
6. The facility shall be manned and supervised during operating hours in accordance with the working plan. Supervisors must be able to identify the types of waste permitted by this licence and those wastes specifically excluded.
7. A site plan shall be maintained, recording the locations of deposited waste. The Ordnance Survey National Grid reference of the site shall be included on the plan. The types of waste specified in condition two shall be deposited in separate locations at the waste disposal site. Their positions shall be prominently identified by a display board of durable material and finish indicating the nature of the material deposited. These areas shall also be indicated on the site plan described in condition four.
8. All asbestos bearing waste must be disposed of in accordance with the procedures indicated in the Department of the Environment Waste Management Paper No. 18.

#### SCHEDULE D - OPERATIONS

1. The licence holder shall notify the Waste Disposal Authority of any change in the actual conduct of operations, (from the proposals shown in the working plan and disposal licence), at least one month before the proposed change is implemented. Such changes as are agreed shall be placed in the licence that shall be amended appropriately. All operations shall be carried out in accordance with the working plan and agreed amendments.
2. The types of wastes accepted at the facility shall consist only of those specified in Schedule C of this licence. All wastes shall be visually inspected to ensure that they conform with the requirements of Schedule C of this licence. Any wastes not conforming to the requirements of Schedule C shall be rejected as unsuitable for disposal at the facility.
3. Records shall be kept of the dates of deposition and the types and quantities of each of the above wastes deposited at the site, together with the form of containment where applicable. Copies of such records shall be made available to the Disposal Authority and Summaries of this data are to be forwarded by 1st February and 1st August each year.
4. Normal site opening hours shall be between the hours of 13.30 and 15.30 on Tuesdays and Thursday only. However, in the event of an emergency (or other special circumstances), the site may be opened at other times given the prior information of the Disposal Authority.
5. Supervision of the site during working hours shall be the duty of the of the Protective Services Team under the direction of the Total Quality Engineer (Environment). Any changes of these responsibilities shall be communicated to the Disposal Authority.
6. The facility shall be manned and supervised during operating hours in accordance with the working plan. Supervisors must be able to identify the types of waste permitted by this licence and those wastes specifically excluded.
7. A site plan shall be maintained, recording the locations of deposited waste. The Ordnance Survey National Grid reference of the site shall be included on the plan. The types of waste specified in condition two shall be deposited in separate locations at the waste disposal site. Their positions shall be prominently identified by a display board of durable material and finish indicating the nature of the material deposited. These areas shall also be indicated on the site plan described in condition four.
8. All asbestos bearing waste must be disposed of in accordance with the procedures indicated in the Department of the Environment Waste Management Paper No. 18.



9. Leachate migration from the site shall be within limits, both of concentration and volume, acceptable to the Waste Disposal Authority in consultation with the National Rivers Authority. Such works as are necessary to maintain such limits acceptable to the Waste Disposal Authority, shall be carried out when and where necessary, following consultation with that Authority and notification to the National Rivers Authority.
10. When required by the Waste Disposal Authority or the National Rivers Authority, facilities shall be provided for the sampling of deposits and the monitoring of leachates.
11. All drums and similar containers are to be disposed of in accordance with the procedures indicated in the Institute of Waste Management Code of Practice 1988.
12. Gates and fencing shall be provided and maintained to the reasonable satisfaction of the Disposal Authority, and all reasonable precautions shall be taken to prevent unauthorised and unrecorded deposit of waste on the site.
13. Measures, including proper maintenance and use, shall be undertaken to control the noise of machinery and vehicles operating at the facility which may be detrimental to the amenities of the locality.
14. Measures shall be taken to effectively suppress dust, malodours or vermin which may be detrimental to the amenities of the locality.
15. No waste material shall be burnt within the boundaries of the facility. Any outbreak of fire shall be regarded as an emergency and immediate action shall be taken to extinguish it. Fire fighting equipment and emergency water supplies shall be provided, maintained and identified in accordance with the working plan. All outbreaks of fire shall be reported to the County Fire Brigade and the Disposal Authority.
16. In the event of an emergency, the appropriate procedures specified in the emergency plan required by Condition 9 of Schedule B shall be implemented. The Waste Disposal Authority shall be informed forthwith of any emergency. The circumstances of an emergency shall be confirmed to the Waste Disposal Licence in writing as soon as is practicable.
17. Measures shall be taken to prevent damage to pipework, valves and pumps which may cause pollution of water, danger to public health or be seriously detrimental to the amenities of the locality.
18. All site roads shall be laid to falls to encourage surface water run off, and be maintained substantially free from potholes. Any potholes shall be filled with clean compacted hard-core or rubble within 10 working days.

9. Leachate migration from the site shall be within limits, both of concentration and volume, acceptable to the Waste Disposal Authority in consultation with the National Rivers Authority. Such works as are necessary to maintain such limits acceptable to the Waste Disposal Authority, shall be carried out when and where necessary, following consultation with that Authority and notification to the National Rivers Authority.
10. When required by the Waste Disposal Authority or the National Rivers Authority, facilities shall be provided for the sampling of deposits and the monitoring of leachates.
11. All drums and similar containers are to be disposed of in accordance with the procedures indicated in the Institute of Waste Management Code of Practice 1988.
12. Gates and fencing shall be provided and maintained to the reasonable satisfaction of the Disposal Authority, and all reasonable precautions shall be taken to prevent unauthorised and unrecorded deposit of waste on the site.
13. Measures, including proper maintenance and use, shall be undertaken to control the noise of machinery and vehicles operating at the facility which may be detrimental to the amenities of the locality.
14. Measures shall be taken to effectively suppress dust, malodours or vermin which may be detrimental to the amenities of the locality.
15. No waste material shall be burnt within the boundaries of the facility. Any outbreak of fire shall be regarded as an emergency and immediate action shall be taken to extinguish it. Fire fighting equipment and emergency water supplies shall be provided, maintained and identified in accordance with the working plan. All outbreaks of fire shall be reported to the County Fire Brigade and the Disposal Authority.
16. In the event of an emergency, the appropriate procedures specified in the emergency plan required by Condition 9 of Schedule B shall be implemented. The Waste Disposal Authority shall be informed forthwith of any emergency. The circumstances of an emergency shall be confirmed to the Waste Disposal Licence in writing as soon as is practicable.
17. Measures shall be taken to prevent damage to pipework, valves and pumps which may cause pollution of water, danger to public health or be seriously detrimental to the amenities of the locality.
18. All site roads shall be laid to falls to encourage surface water run off, and be maintained substantially free from potholes. Any potholes shall be filled with clean compacted hard-core or rubble within 10 working days.

19. All site roads shall as necessary or when requested by the Disposal Authority be sprayed with clean water to effectively suppress dust.
20. Solid wastes shall be compacted and formed into a layer as soon as possible after deposit and not later than the end of the working day in which it was deposited.
21. The phasing and direction of the depositing of waste shall be carried out as specified in the working plan and each phase shall be completed before the deposit of waste is commenced in each subsequent phase.
22. The layers of waste shall be formed by using the compaction equipment specified in the working plan, equipped with a blade or other suitable levelling device. The waste shall either:-

- a) be deposited on the ground forming the base of the site or on a previous layer in front of the face and shall be formed into a compacted layer by being pushed upwards and driven over by the compaction equipment specified in the working plan.

or it shall

- b) be deposited on the surface of the site behind the face and partially compacted by the specified compaction equipment before being pushed over the face.

23. All long objects, including trees, lamp posts etc., shall be broken in lengths not exceeding 2.0 metres and covered each day in such a position that they are not within 1.0 metres of the surface or within 2.0 metres of any flank or face.
24. Before covering, all working flanks and faces shall be compacted to form gradients not greater than 1 in 3.
25. Each layer of waste and covering material shall be laid to a fall to encourage surface water runoff from the working face.
26. Until final restoration, completed landfill areas shall be graded and maintained as detailed in the working plan.
27. Any cessation of operations for a period in excess of 12 weeks shall be notified to the Disposal Authority. Not less than 14 days notice shall be given to the Waste Disposal Authority of the date on which operations are to recommencing the event of such a cessation.
28. A copy of any notice or instruction received in respect of the facility from any authority other than the Disposal Authority, which in any way relates to the use of the facility, shall be given to the Disposal Authority within 7 days of the receipt of such a notice or instruction.

19. All site roads shall as necessary or when requested by the Disposal Authority be sprayed with clean water to effectively suppress dust.
20. Solid wastes shall be compacted and formed into a layer as soon as possible after deposit and not later than the end of the working day in which it was deposited.
21. The phasing and direction of the depositing of waste shall be carried out as specified in the working plan and each phase shall be completed before the deposit of waste is commenced in each subsequent phase.
22. The layers of waste shall be formed by using the compaction equipment specified in the working plan, equipped with a blade or other suitable levelling device. The waste shall either:-
  - a) be deposited on the ground forming the base of the site or on a previous layer in front of the face and shall be formed into a compacted layer by being pushed upwards and driven over by the compaction equipment specified in the working plan.or it shall
  - b) be deposited on the surface of the site behind the face and partially compacted by the specified compaction equipment before being pushed over the face.
23. All long objects, including trees, lamp posts etc., shall be broken in lengths not exceeding 2.0 metres and covered each day in such a position that they are not within 1.0 metres of the surface or within 2.0 metres of any flank or face.
24. Before covering, all working flanks and faces shall be compacted to form gradients not greater than 1 in 3.
25. Each layer of waste and covering material shall be laid to a fall to encourage surface water runoff from the working face.
26. Until final restoration, completed landfill areas shall be graded and maintained as detailed in the working plan.
27. Any cessation of operations for a period in excess of 12 weeks shall be notified to the Disposal Authority. Not less than 14 days notice shall be given to the Waste Disposal Authority of the date on which operations are to recommencing the event of such a cessation.
28. A copy of any notice or instruction received in respect of the facility from any authority other than the Disposal Authority, which in any way relates to the use of the facility, shall be given to the Disposal Authority within 7 days of the receipt of such a notice or instruction.

#### SCHEDULE E - MONITORING

1. A hydrogeological survey shall be completed by licence holder to the satisfaction of the Waste Regulation Authority within seven months of this licence being granted. The survey shall consist of two phases.

Phase one shall comprise a desk top study of the geology, hydrogeology and tipping practices employed on the waste disposal site and adjacent areas. This study will be completed within four weeks of this licence being granted and shall be supported by recommendations for site investigation works to be undertaken to further characterise the geological and hydrogeological setting of the Waste Disposal Site.

Phase two shall provide ground water monitoring boreholes of suitable construction and in locations approved by the Waste Regulation Authority in Consultation with the National Rivers Authority. These boreholes shall provide sufficient information to fully characterise both the geological and hydrogeological setting of the Waste Disposal Site.

2. The Disposal Authority reserves the right to add any monitoring requirements that are reasonably deemed necessary in order to ensure that actual or potential pollution of the environment does not occur.

#### SCHEDULE E - MONITORING

1. A hydrogeological survey shall be completed by licence holder to the satisfaction of the Waste Regulation Authority within seven months of this licence being granted. The survey shall consist of two phases.

Phase one shall comprise a desk top study of the geology, hydrogeology and tipping practices employed on the waste disposal site and adjacent areas. This study will be completed within four weeks of this licence being granted and shall be supported by recommendations for site investigation works to be undertaken to further characterise the geological and hydrogeological setting of the Waste Disposal Site.

Phase two shall provide ground water monitoring boreholes of suitable construction and in locations approved by the Waste Regulation Authority in Consultation with the National Rivers Authority. These boreholes shall provide sufficient information to fully characterise both the geological and hydrogeological setting of the Waste Disposal Site.

2. The Disposal Authority reserves the right to add any monitoring requirements that are reasonably deemed necessary in order to ensure that actual or potential pollution of the environment does not occur.

#### SCHEDULE F - RESTORATION

1. The final layer of waste deposited shall be subject to the minimum compaction, and shall to a depth of not less than one metre be kept free of materials likely to interfere with the final restoration or subsequent use.
2. Until final restoration, completed areas of landfilling shall be graded and maintained in accordance with the details specified in the working plan.
3. Final restoration shall be to the contours in accordance with the working plan. The capping layer shall be covered with a minimum of 0.500m of subsoil and soil to prevent desiccation penetration of roots and or erosion.

#### NOTE

The terms of the site licence shall be made known to any person who is given responsibility for the management and control of the site.

Notwithstanding the generality of the above conditions the activities to which this licence relates shall not be carried on so as to cause pollution to water or danger to public health or become seriously detrimental to the activities of the locality affected by the activities.

The proceeding conditions do not preclude the Disposal Authority from adding to, or substituting such conditions as may be necessary to maintain the waste disposal site in good order.

atop/tracey/bpoil

#### SCHEDULE F - RESTORATION

1. The final layer of waste deposited shall be subject to the minimum compaction, and shall to a depth of not less than one metre be kept free of materials likely to interfere with the final restoration or subsequent use.
2. Until final restoration, completed areas of landfilling shall be graded and maintained in accordance with the details specified in the working plan.
3. Final restoration shall be to the contours in accordance with the working plan. The capping layer shall be covered with a minimum of 0.500m of subsoil and soil to prevent desiccation penetration of roots and or erosion.

#### NOTE

The terms of the site licence shall be made known to any person who is given responsibility for the management and control of the site.

Notwithstanding the generality of the above conditions the activities to which this licence relates shall not be carried on so as to cause pollution to water or danger to public health or become seriously detrimental to the activities of the locality affected by the activities.

The proceeding conditions do not preclude the Disposal Authority from adding to, or substituting such conditions as may be necessary to maintain the waste disposal site in good order.

atop/tracey/bpoil