



ASiantaeth YR
AMGYLCHEDD
ENVIRONMENT
AGENCY

Permit with introductory note

Pollution Prevention and Control Regulations 2000

**Clariant UK Ltd
Llantwit Fardre
Pontypridd
CF38 2SN**

Permit number

BL7396

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I.2000 No.1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part 1 to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The Permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description of the installation regulated by this permit

The main purpose of the activity at the installation is:-

A new type of polymer has been developed based on a new monomer (AMPS or 2-acrylamido-2methylpropanesulphonic acid). The polymer has a variety of applications as a thickening agent in personal care products and the oil industry, for example. It is intended to produce up to 500 tonnes a year of these polymers in a new plant on the existing site.

The polymer plant will comprise one 5m³ reactor and one 6m³ paddle dryer together with associated equipment. This consists of a condenser and wet scrubber for the removal of ammonia and solvent from the waste gas stream. One fresh solvent bulk storage tank and two recovered solvent tanks are provided together with pumps and piping.

In addition, to support the operation of the reactor, the following ancillary operations are included in the permitted installation. (These are shared with the existing production processes at the site, which themselves do not form part of the defined installation):

- Boiler house comprising two gas-fired boiler units (with light oil back-up fuel).
- Materials storage warehouse, for the storage of raw materials and waste products.
- Cooling tower, Effluent drainage system and tanks, together with surface water drainage systems.

The reactor will be operated manually, on a shift basis, as a batch process supported by a process control computer.

The solvent used in the process is recovered for re-use, and exhaust gases from the reactor are passed through a condenser to achieve this. The use of a scrubber system minimises any residual releases to atmosphere.

Surface waters from the manufacturing areas are collected and discharged under consent to sewers. Aqueous effluent from the process is directed through the site process effluent system to the effluent tanks for off-site disposal.

Rainwater falling on non-manufacturing areas is directed towards a marshy area outside the installation, to the south of the site.

There are minimal solid wastes requiring off-site disposal.

Further information concerning the installation can be found in the 'Non-technical summary section' of the Operator's application (pages 1-3). This can be viewed at the Public Registers of Rhondda Cynon Taff County Borough Council or the local area office of the Environment Agency.

Other PPC Permits relating to this installation

Permit holder	Permit Number	Date of Issue
None		

Superseded Licenses/Consents/Authorisations relating to this installation

Holder	Reference Number	Date of Issue
None		

Talking to us

If you contact the Agency about this Permit please quote the Permit Number.

The Operator should use the Emergency Hotline telephone number (0800 80 70 60) or any other number notified to it to give a notification under condition 5.1.1.

Confidentiality

The Permit requires the Operator to provide information to the Agency. The Agency will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Agency to have such information withheld from the register as provided in the PPC Regulations. To enable the Agency to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the permit

This Permit may be varied in the future. The Status Log within the Introductory Note to any such variation will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the permit

Before this Permit can be wholly or partially surrendered, an application to surrender the Permit has to be made. For the applicant to be successful, they would have to be able to demonstrate to the Agency, in accordance with Regulation 19 of the PPC Regulations, that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit. If the Permit authorises the carrying out of a specified waste management activity, then there is a further requirement that the transferee is considered to be a "fit and proper person" to carry out that activity.

Status Log

Detail	Date	Comment
Application BL7396	Received 03/12/01	
Response to request for information	Request dated 11/02/02	Response dated 20/02/02 and 25/02/02
Response to request for information	Request dated 20/02/02	Response dated 01/03/02 and 04/03/02
Response to request for information	Request dated 11/03/02	Response dated 18/03/02
Permit BL7396	Determined 15/04/02	

End of introductory note.

Permit

Pollution Prevention and Control
Regulations 2000



**ENVIRONMENT
AGENCY**

Permit

Permit number
BL7396

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973), hereby authorises **Clariant UK Ltd** ("the Operator"),

Whose Registered Office is
**Calverley Lane
Horsforth
Leeds
West Yorkshire
LS18 4RP**

Company registration number 3380658

to operate an Installation at

**Llantwit Fardre
Pontypridd
CF38 2SN**

to the extent authorised by and subject to the conditions of this Permit.

Signed

A handwritten signature in black ink, appearing to read 'N.P. Allen', enclosed in a rectangular box.

Dr N.P.Allen

Authorised to sign on behalf of the Environment Agency

Date

15 April 02

Conditions

1 The permitted installation

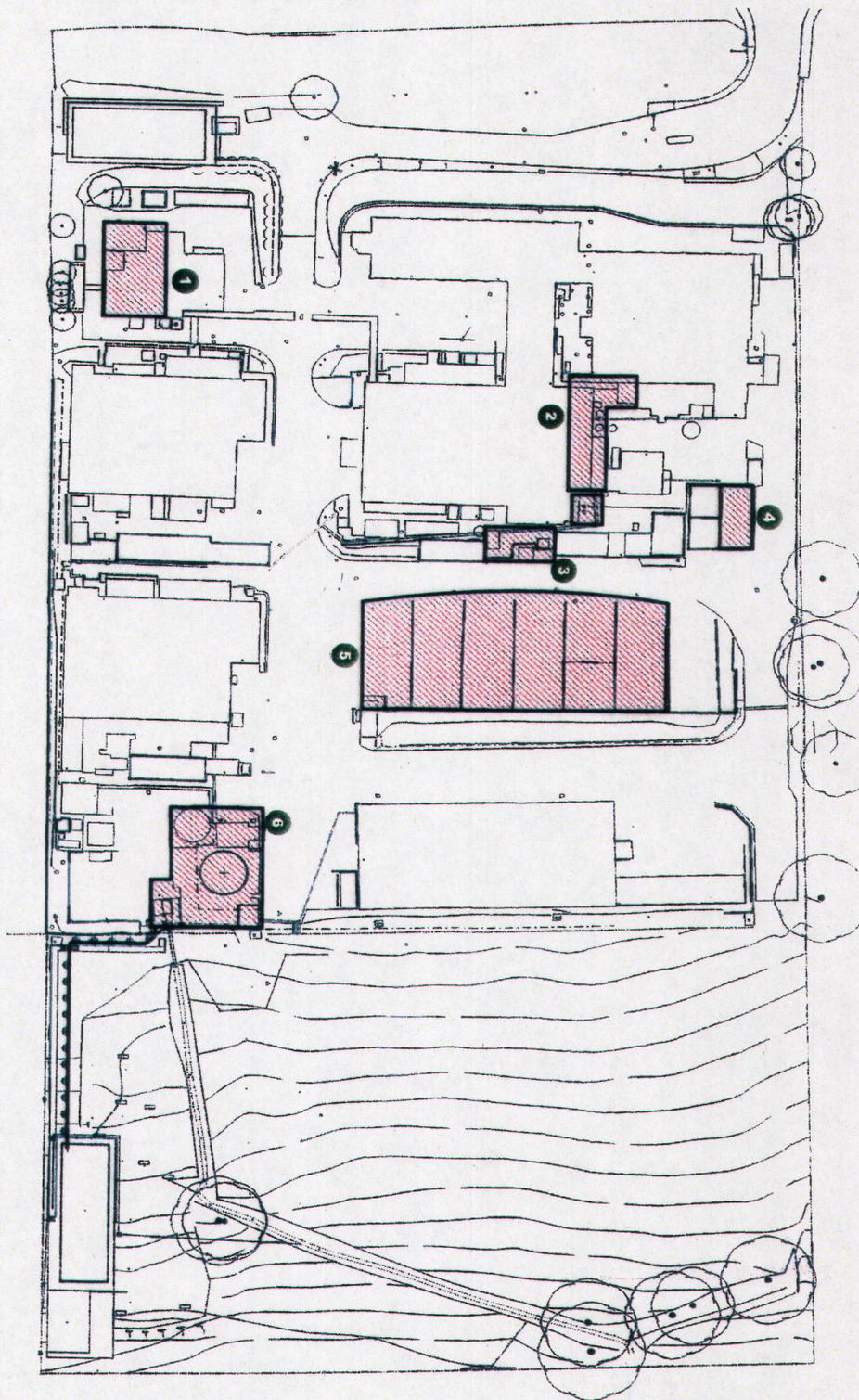
1.1.1 The Operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1.

Table 1.1.1

Activity under Schedule 1 of the Regulations/ Associated Activity	Description of specified activity	Schedule 1 Activity Reference (if applicable)	Limits of specified activity
Co-polymerisation of unsaturated hydrocarbons	Production of a range of thickening agents via a co-polymerisation process	4.1 A(1)(c)	Receipt of raw materials to material being transferred to bulk packages.
Water discharges to foul sewers	Discharge of process water and site drainage from the installation.	-	From interceptors to point of entry to sewer
Water discharges to soakaway	Discharge of rainwater falling on the non-manufacturing areas of the installation.	-	From interceptors via rainwater sump to point of discharge on marshy land at south of site.

1.1.2

The activities authorised under condition 1.1.1 shall not extend beyond the Site as described in the Application, pages 1 and 2, being the areas shown edged in hatches on the plan below



Key: 1 – Boiler House; 2 – AMPS Process; 3 – Bulk Storage; 4 – Cooling Water; 5 – Waste & Effluent Store; 6 – Effluent Tanks.

1.1.3 There are no pre-operation conditions

2 Operational Matters

2.1 Management techniques and control

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency.

Table 2.1.1 : Management and control

Description	Parts	Date Received
Application	The response to question 2.1 given in pages 1-8 of section 2.1 and Appendix C of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to questions 1-4	20/02/02
Response to 2nd Schedule 4 Part 1 Notice	Response to questions 1-3	04/03/02

2.1.2 All plant, equipment and technical means used in operating the Permitted Installation shall be maintained in good operating condition.

2.1.3 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.

2.1.4 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

2.1.5 All staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with appropriate training and written operating instructions to enable them to carry out their duties.

2.2 Raw materials (including water)

2.2.1 The Operator shall, subject to the conditions of this Permit, use raw materials (including water) as described in the documentation specified in Table 2.2.1, or as otherwise agreed in writing by the Agency.

Table 2.2.1 : Raw materials (including water)

Description	Parts	Date Received
Application	The response to question 2.2 given in pages 9-21 of section 2.2 and Appendix A of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to questions 5-9	20/02/02
Response to 2nd Schedule 4 Part 1 Notice	Response to questions 4-5	04/03/02

2.3 **Operating Techniques**

2.3.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.3.1, or as otherwise agreed in writing by the Agency.

Table 2.3.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.3 given in pages 22-48 section 2.3 of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to questions 10-23	20/02/02
Response to 2nd Schedule 4 Part 1 Notice	Response to questions 6, 10 and 11	04/03/02
Response to 3rd Schedule 4 Part 1 Notice	Response to questions 3,4	18/03/02

2.4 **Groundwater protection**

2.4.1 The Permitted Installation shall, subject to the conditions of this Permit, be controlled as described in the documentation specified in Table 2.4.1, or as otherwise agreed in writing by the Agency.

Table 2.4.1: Groundwater protection

Description	Parts	Date Received
Application	The response to questions 2.4 given in page 49 section 2.4 of the application	03/12/01

2.5 **Waste handling and storage**

2.5.1 The Operator shall, subject to the conditions of this Permit, handle and store waste as described in the documentation specified in Table 2.5.1, or as otherwise agreed in writing by the Agency.

Table 2.5.1: Waste handling and storage

Description	Parts	Date Received
Application	The response to question 2.5. given in pages 50-52 section 2.5 of the application	03/12/01

2.5.2 Waste materials specified in Table 2.5.2 shall only be stored on the site in the location and manner specified in that Table.

Table 2.5.2: Waste stored on site

Description of Waste	Location of Storage on Site	Manner of Storage	Storage Conditions
Off-spec materials for recovery	L1	Segregated area	Impermeable hard standing which is connected to site surface water drains, subject to continuous TOC analysis
Waste oil	L1	Drums within segregated area	Drums to be clearly marked, held on impermeable hard standing which is connected to site surface water drains, subject to continuous TOC analysis
Material for deposit on off-site landfill	L1	Segregated area	Impermeable hard standing which is connected to site surface water drains, subject to continuous TOC analysis

2.6 Waste recovery and disposal

2.6.1 The Operator shall, subject to the conditions of this Permit, recover and dispose of waste as described in the documentation specified in Table 2.6.1, or as otherwise agreed in writing by the Agency.

Table 2.6.1: Waste recovery and disposal

Description	Parts	Date Received
Application	The response to question 2.6 given in page 53 section 2.6 of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to question 24	20/02/02

2.7 Energy Efficiency

2.7.1 The Operator shall, subject to the conditions of this Permit, use energy as described in the documentation specified in Table 2.7.1, or as otherwise agreed in writing by the Agency.

Table 2.7 1: Energy efficiency

Description	Parts	Date Received
Application	The response to question 2.7 given in pages 54-56 section 2.7 and Appendix B pages 1-8 of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to questions 25-27	20/02/02

2.7.2 The Operator shall produce a report annually on the energy consumption of the installation. The exact scope of this report shall be agreed with the Agency prior to submission. This report shall be sent to the Agency.

2.7.3 The Operator shall have an energy efficiency plan prepared within one year of permit issue and it shall be updated annually thereafter.

2.8 **Accident prevention and control**

2.8.1 The Operator shall, subject to the conditions of this Permit, prevent and limit the consequences of accidents as described in the documentation specified in Table 2.8.1, or as otherwise agreed in writing by the Agency.

Table 2.8.1 : Accident prevention and control

Description	Parts	Date Received
Application	The response to question 2.8 given in pages 57-61 section 2.8 of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to questions 28-29	20/02/02
Response to 2nd Schedule 4 Part 1 Notice	Response to question 12	04/03/02

2.9 Noise and vibration

2.9.1 The Operator shall, subject to the conditions of this Permit, control noise and vibration as described in the documentation specified in Table 2.9.1, or as otherwise agreed in writing by the Agency.

Table 2.9.1 : Noise and vibration

Description	Parts	Date Received
Application	The response to question 2.9 given in pages 62-65 section 2.9 of the application	03/12/01
Response to 2nd Schedule 4 Part 1 Notice	Response to question 7-9	04/03/02 and 18/03/02

2.10 Monitoring

2.10.1 The Operator shall, subject to the conditions of this Permit, carry out, evaluate and assess monitoring as described in the documentation specified in Table 2.10.1, or as otherwise agreed in writing by the Agency.

Table 2.10.1 : Monitoring

Description	Parts	Date Received
Application	The response to question 2. given in pages 66-69 section 2.10 and Appendix D of the application	03/12/01
Response to 1st Schedule 4 Part 1 Notice	Response to questions 30-34	20/02/02
Response to 2nd Schedule 4 Part 1 Notice	Response to questions 13-15	04/03/02
Response to 3rd Schedule 4 Part 1 Notice	Response to questions 1,2	18/03/02

2.10.2 Where requested in writing by the Agency, the Operator shall provide at least 14 days advance notice of undertaking monitoring/spot sampling.

2.10.3 There shall be provided:

- a** safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2, unless otherwise specified in that Schedule; and
- b** safe means of access to other sampling/monitoring points when required by the Agency.

2.11 **Decommissioning**

2.11.1 The Operator shall, subject to the conditions of this Permit, make provision for decommissioning the installation as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

Table 2.11.1 : Decommissioning

Description	Parts	Date Received
Application	The response to question 2.11 given in pages 70-72 section 2.11 of the application	03/12/01

2.12 **Multi-operator installations**

This is not a multi-operator installation

3 Records

- 3.1.1 A record (a "Specified Record") shall be made of:-
- a** any malfunction, breakdown or failure of plant, equipment or techniques (including down time and any short term and long term remedial measures) that may have, has had or might have had an effect on the environmental performance of the Permitted Installation. These records shall be kept in a log maintained for that purpose;
 - b** all monitoring and sampling taken or carried out in accordance with the conditions of this permit and any assessment or evaluation made on the basis of such data.;
- 3.1.2 There shall be made available for inspection by the Agency at any reasonable time:
- a** Specified Records;
 - b** any other records made by the Operator in relation to the operation of the Permitted Installation ("Other Records").
- 3.1.3 A copy of any Specified or Other Records shall be supplied to the Agency on demand and without charge.
- 3.1.4 Specified Records and Other Records shall:-
- a** be legible;
 - b** be made as soon as reasonably practicable; and
 - c** indicate any amendments which have been made and shall include the original record wherever possible.
- 3.1.5 Specified Records and Other Records shall be retained for a minimum period of [4] years from the date when the records were made.
- 3.1.6 For all waste received at or produced from the Permitted Installation, the Operator shall record (and shall retain such records for a minimum of 4 years)
- a** its composition, or as appropriate, description;
 - b** the best estimate of the quantity produced;
 - c** its disposal routes; and
 - d** the best estimate of the quantity sent for recovery.
- 3.1.7 A record shall be made at the Permitted Installation of any complaints concerning the Installation's effect or alleged effect on the environment. The record shall give the date of complaint, time of complaint, a summary of any investigation and the results of such investigation. Such records shall be made in a log kept for this purpose.

4 Reporting

- 4.1.1 All reports and notifications required by this Permit, or by Regulation 16 of the PPC Regulations, shall be sent to the Environment Agency at the address notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall report the parameters listed in Table S2 to Schedule 2 as follows:
- a in respects of the emission points specified;
 - b for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - c giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - d sending the report to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall, within 36 months of the issue of this Permit, submit a report on potential environmental improvements to the Permitted Installation. For each of the subject areas identified in Section 2 of the appropriate technical guidance, the report shall assess the costs and benefits of alternative techniques that may provide environmental improvement. This shall include, but not be limited to, those techniques listed in guidance. The methodologies used should be based on those given in Agency guidance note IPPC H1 (Environmental Assessment and Appraisal of BAT) and should justify, against the Best Available Techniques criteria, where potential improvements are not planned to be implemented. As part of their management system the Operator shall submit an updated report every 36 months.
- 4.1.4 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.5 Fugitive emissions shall be reviewed on an annual basis and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them.

5 Notifications

- 5.1.1 The Operator shall notify the Agency **without delay** of:-
- a** the detection of an emission of any substance which exceeds any limit or criteria in this Permit specified in relation to the substance;
 - b** the detection of any fugitive emission which has caused or may cause pollution unless the quantity emitted is so trivial that it would be incapable of causing pollution;
 - c** the detection of any malfunction, breakdown or failure of plant or techniques which has caused or may have the potential to cause pollution; and
 - d** any accident which has caused or may have the potential to cause pollution.
- 5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1 of this Permit by sending:-
- a** the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
 - b** the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;
- and such information shall be in accordance with that Schedule.
- 5.1.3 The Operator shall give written notification as soon as practicable, of any of the following:
- a** permanent cessation of the operation of any part of or all of the Permitted Installation;
 - b** cessation of the operation of any part of or all of the Permitted Installation for a period, likely to exceed 1 year; and
 - c** resumption of the operation of any part of or all of the Permitted Installation after a cessation notified under 5.1.3(b).
- 5.1.4 The Operator shall notify the following matters to the Agency, in writing, within 14 days of their occurrence:
- a** any change in the Operator's trading name, registered name or registered office address;
 - b** a change to any particulars of the Operator's ultimate holding company (including details of an ultimate holding company where the Operator has become a subsidiary);
 - c** any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up.
- 5.1.5 Where the operator has entered into a Climate Change Levy Agreement with the Government, the Operator shall, within 14 days, notify the Agency, in writing, in the event that the Secretary of State has not re-certified that agreement.

5.1.6

Where the Operator has entered into the Emissions Trading Scheme by taking on a voluntary target with a financial incentive, the Operator shall, within 14 days, notify the Agency, in writing, of either:

- a** a decision by the operator to withdraw from the scheme, or
- b** failure to comply with the emissions trading scheme at the end of the 5 year period covered by the scheme.

6 Emissions

6.1 Emissions into air

6.1.1 Emissions to air from the emission point(s) specified in Table 6.1.1 shall only arise from the source(s) specified in that Table.

Table 6.1.1: Emission points into air

Emission point reference/description	Source	Location of emission point
A1	Vent stack from wet scrubber attached to the polymer plant	Stack 3m above roof height of the polymer plant
A2	7m combined vent stack from the two boilers	Vent stack serving Boiler House

6.1.2 The limits for emissions into air for the parameter(s) and emission point(s) set out in Table 6.1.3 shall not be exceeded.

6.1.3 The Operator shall carry out monitoring of the parameters listed in Table 6.1.3, from the emission points and at least at the frequencies specified in that Table.

Table 6.1.3: Emission limits into air

Parameters	Emission Point	
	A1	A2
<i>Ammonia mg m⁻³</i>	15	-
<i>Max instantaneous concentration.</i>		
<i>Frequency of monitoring</i>	monthly	-
<i>Volatile Organic Compounds (as toluene). Maximum hourly average mass emission - kg/hr</i>	2	-
<i>Frequency of monitoring</i>	monthly	-
<i>Smoke</i>	-	Note 1 Note 2

Note 1: When firing on natural gas smoke emissions should be invisible except for start up from cold, when emissions should not exceed Ringelmann Shade 1

Note 2: When firing on oil smoke emissions should not exceed Ringelmann Shade 1 except for start up from cold, when emissions should not exceed Ringelmann Shade 2

Where an annual mass limit for a substance is stated in Table 6.1.4, the aggregate emission of such substance from the Permitted Installation into air from the emission point(s) specified in Table 6.1.1 shall not exceed that limit in any year.

Table 6.1.4 Annual mass limits

Substance	Limit - kg
Ammonia	-
VOC's	-

6.1.4 The sulphur content of the backup fuel for the boilers shall not exceed 0.2% w/w basis.

6.2 Emissions to land

6.2.1 Emissions into or onto land from the emission point specified in Table 6.2.2 shall only arise from the source and shall be emitted only to the soakaway specified in that Table.

Table 6.2.2 Emission points into land

Emission point reference/description	Source	Soakaway
W1 (being the weir of the diverted rainwater sump Drawing No 2.3.2-1c)	Discharge of rainwater falling on the non-manufacturing areas of the installation.	Marshy land to the south of the site.

6.2.2 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.

6.2.3 The Operator shall carry out monitoring of the parameters listed in Table 6.2.3, from the emission points and at least at the frequencies specified in that Table.

Table 6.2.3: Emission limits to land

Parameter	Emission Point W1	Monitoring Frequency
TOD mg l ⁻¹	90	Daily should discharge be occurring
pH	Between 6-8	Daily should discharge be occurring

6.2.4 The Operator shall carry out on at least an annual basis a fuller analysis of the releases to soakaway for a suite of pollutants agreed in writing with the Agency. The results of this analysis shall be forwarded to the Agency by 31st January of each year.

6.3 Emissions to water [other than emissions to sewer]

6.3.1 There shall be no emission to water from the Permitted Installation

6.4 Emissions to sewer

Emissions into sewer from the emission point(s) specified in Table 6.4.1 shall only arise from the source(s) specified in that Table.

Table 6.4.1 Emission points into sewer

Emission point reference	Source	Sewer
S1 (being Sample point 'X' on drawing B of Dwr Cymru Consent TE519.)	Releases from the surface water drainage system as per Drawing No 2.3.2-1b	Dwr Cymru

6.4.1 The limits for the emissions into sewer for the parameter(s) and emission point(s) set out in Table 6.4.2 shall not be exceeded.

Table 6.4.2 Emission limits into sewer

Parameter	Emission point S1
COD mg l-1	2000
Methanol mg l-1	200
Ethanol mg l-1	100
Propanol mg l-1	100
Para-hydroxybenzoic acid (PHBA) mg l-1	100
Phenol mg l-1	10
PH	6 to 11
Hourly flow m3	5.76
Daily flow m3	138.1

6.4.2 There shall be no emission into sewer from the Permitted Installation of any substance prescribed for water for which no limit is specified in Table 6.4.2 except in a concentration which is no greater than the background concentration.

6.4.3 The Operator shall carry out on at least an annual basis a fuller analysis of the release to sewer for a suite of pollutants agreed in writing with the Agency. The results of this analysis shall be forwarded to the Agency by 31st January of each year.

6.4.4 Where an annual mass limit for a substance is stated in Table 6.4.4, the aggregate emission of such substance from the Permitted Installation into sewer from the emission points specified in Table 6.4.1 shall not exceed that limit in any year.

Table 6.4.4 Annual mass emission limit

Substance	Annual limit - kg
-	-
-	-

6.5 Emissions of heat

6.5.1 There are no specific conditions in relation to emissions of noise and vibration.

6.6 Emissions of noise and vibration

6.6.1 There are no specific conditions in relation to emissions of noise and vibration.

7

Transfer to effluent treatment plant

No transfers to effluent treatment plant are controlled under this part of this Permit. Emissions to water are controlled under 6.4

8 **Off site conditions**

8.1.1 **There are no off site conditions.**

9 Improvement programme

9.1.1 The Operator shall complete the requirements specified in Table 9.1.1 by the date specified in that Table, and shall send written notification of the date of completion of each requirement to the Agency, at the Reporting Address, within 14 days of the completion of each such requirement.

Table 9.1.1: Improvement programme requirements

Reference	Requirement	Date
9.1	A report shall be sent to the Agency on progress towards the implementation of an Environmental Management System. The report shall include the intention for any subsequent accreditation of the EMS.	31 December 2002
9.2	A report shall be sent to the Agency on progress towards the implementation of solvent recovery methods to remove the need for any off-site solvent disposal.	31 December 2002
9.3	A report shall be sent to the Agency detailing results and conclusions of the monitoring of releases to all environmental media during commissioning.	30 June 2002
9.4	A report shall be sent to the Agency giving details of the implementation of a 'Site Odour Management Plan', having regard to IPPC General Sector Guidance S 0.01.	31 July 2002
9.5	A report shall be sent to the Agency giving details of the proposal to install a de-ionisation plant. The report shall include as an option, the costs for the reuse of part or all of the water captured by a rainwater harvesting scheme	30 Sept. 2002
9.6	Following successful plant commissioning and establishment of routine steady operation, the Operator shall undertake a noise survey and assessment. The scope of this work shall be agreed with the Agency before undertaking it, and a report sent to the Agency on the completed work.	30 Sept. 2002
9.7	The Operator shall propose details of the scheme to identify the maximum concentration of phenol in the bulk storage area. Once agreed by the Agency, this proposal shall be conducted and a report sent to the Agency.	30 November 2002
9.8	The Operator shall propose details of a scheme to monitor the emissions from the on-site boilers and assess their environmental impact. Once agreed by the Agency, this proposal shall be conducted and a report sent to the Agency.	31 January 2003
9.9	The Operator shall carry out a BAT assessment of current methods used for analytical determination of aqueous species including comparison with the corresponding CEN standards.	31 May 2004
9.10	The Operator shall sink a borehole in the southeastern extremity of the installation. Groundwater samples shall be analysed for the same suite of compounds carried out for the site survey forming part of the PPC application. This analysis shall be carried out on a quarterly basis for a minimum of two years and results sent to the Agency forthwith. A final report shall be submitted assessing the evidence for groundwater contamination at this corner of the installation	31 May 2004

10 Interpretation

10.1.1 In this Permit, the following expressions shall have the following meanings:

"Authorised Officer"

means any person authorised by the Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, powers specified in Section 108(4) of that Act.

"Background concentration"

means the same as "background quantity" as defined in paragraph 11 to Part 2 to Schedule 1 of the PPC Regulations.

"Fugitive emission"

means an emission from any point other than those specified in the Tables in part 6 of this Permit.

"LAeq"

means the A-weighted equivalent continuous equal energy level (dBA)

"Monitoring"

includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Permitted Installation"

means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

"PPC Regulations"

means the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit.

"Staff"

includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Substances prescribed for water"

means those substances mentioned in paragraph 13 of Part 2 of Schedule 1 to the PPC Regulations.

"Year"

means calendar year ending 31 December.

"CEN"

means European Committee for Standardization.

10.1.2 Where a minimum limit is set for any emission parameter, references to exceeding the limit shall mean that the parameter shall not be less than that limit.

10.1.3

Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means;

- a** in relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- b** in relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

11 Written agreement to changes

- 11.1.1 When the qualification "or as otherwise agreed in writing" is used in a condition of this Permit, the Operator shall seek such agreement in the following manner:
- a the Operator shall give the Agency written notice of the details of the proposed change, indicating the relevant part(s) of this Permit; and
 - b such notice shall include an assessment of the possible effects of the proposed change (including waste production) on risks to the environment from the Permitted Installation.
- 11.1.2 Any change proposed according to condition 11.1.1 and agreed in writing by the Agency, shall not be implemented until the Operator has given the Agency prior written notice of the implementation date for the change. As from that date, the Operator shall operate the Permitted Installation in accordance with that change, and any relevant documentation referred to in this Permit shall be deemed to be amended.

Schedule 1

Confirmation of condition 5.1.1 notifications, in accordance with condition 5.1.2

This Schedule outlines the information that the Operator must provide to the Agency to satisfy condition 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements must be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the PPC Regulations.

Returns should contain:

Part A

- Name of Operator.
- Permit Number
- Location of Installation.
- Date information provided.
- Time, date and location of the emission.
- Identity and details of the substance[s] emitted to include:-
 - Best estimate of the quantity or the rate of emission, and the time during which the emission took place.
 - Environmental medium into which the emission took place.
 - Measures taken, or intended to be taken, to stop the emission.

Part B

- Date and time of emission
- Any more accurate information on the matters notified under Part A.
- Measures taken, or intended to be taken, to prevent a recurrence of the incident.
- Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission.
- The dates of any Part A notifications within in the previous 24 months.

- Name
- Signature
- Statement that signatory is authorised to sign on behalf of Clariant UK Ltd
- Post.....
- Date

Schedule 2

Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 of this Permit, are listed below.

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Ammonia mg m ⁻³	A1	Every 12 mths	01/07/02
Volatile Organic Chemicals g hr ⁻¹	A1	Every 12 mths	01/07/02
Total oxygen demand mg l ⁻¹	W1	Every 3 mths	01/07/02
pH	W1	Every 3 mths	01/07/02
Biochemical oxygen demand mg l ⁻¹	S1	Every 3 mths	01/07/02
pH	S1	Every 3 mths	01/07/02
Methanol mg l ⁻¹	S1	Every 3 mths	01/07/02
Ethanol mg l ⁻¹	S1	Every 3 mths	01/07/02
Propanol mg l ⁻¹	S1	Every 3 mths	01/07/02
Phenol mg l ⁻¹	S1	Every 3 mths	01/07/02
Para Hydroxybenzoic Acid mg l ⁻¹	S1	Every 3 mths	01/07/02

Schedule 3

Forms to be used

Unless otherwise agreed in writing between Agency and the Operator, the following Agency forms are to be used for reports submitted to Agency.

Media/parameter	Form Number	Date of Form
Air	A1	12/04/02
Water	S1	12/04/02
Land	L1	12/04/02
Energy	E1	12/04/02

END OF PERMIT