

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Quat-Chem Limited

4 Dodgson Street
Rochdale
Lancashire
OL16 5SJ

Variation application number
EPR/BP3630FS/V002

Permit number
EPR/BP3630FS

Quat-Chem Limited, 4 Dodgson Street

Permit number EPR/BP3630FS

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made.

The installation initially produced a single quaternary ammonium compound in a dedicated reactor of 19.7m³ capacity. This variation authorises the introduction of a polymerisation process to the installation and the variation of the existing installation boundary to correct an error in the original permit.

The proposed manufacturing process is for the production of a dilute aqueous solution of polymethacrylic acid (PMAA) solution. The reaction requires thermal activation in an aqueous medium in an oxygen depleted atmosphere. Demineralised water is used in the preparation of PMAA. The new process falls under S4.1 A1 (a)(ii) of The Environmental Permitting (England and Wales) Regulations 2010 for '*producing organic chemicals such as organic compounds containing oxygen*'. Table S1.1 has been updated to reflect the additional activity.

The new raw materials to be used in the process are demineralised water, 4,4-azobiscyanovaleric acid (Vazo 68), methacrylic acid solution and ammonium hydroxide solution. Methacrylic acid and ammonium hydroxide are ordered in 200kg quantities for on-the-day delivery and are fully consumed in the process.

All chemicals will be contained in intermediate bulk containers (IBCs) and drums in bunded warehousing. General segregation of chemical products is practiced within the warehousing. The stainless steel 5m³ reaction vessel is situated within a bund in order to contain potential spills. The bund has a capacity of greater than 110% of the reactor volume.

There are no by-products or planned waste from the reaction. During the quaternary ammonium compound production, any vessel washings are re-used as the water charge for subsequent batches. A minimal volume of effluent is produced during the PMAA manufacturing from the vessel washing. The effluent pH is adjusted before discharge to sewer. The reactor and raw materials storage areas are fully contained.

Given the reaction conditions, plant design and configuration, storage quantities and expected level of production, the applicant has demonstrated that the installation meets the published criteria for a "low impact installation".

The installation meets the Environment Agency guidance for "low impact installations".

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application EPR/BP3630FS/A001	Duly made 19/04/11	Application for organic chemicals low impact installation permit.
Schedule 5 issued	12/05/11	Response 19/05/11
Permit determined	13/07/11	Permit issued to Quat-Chem Limited.
Application EPR/BP3630FS/V002 (variation and consolidation)	Duly made 26/03/14	Application to vary the permit.
Variation determined EPR/BP3630FS/V002	02/06/14	Varied and consolidated permit issued in modern condition format.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number
EPR/BP3630FS

issued to
Quat-Chem Limited (“the operator”)

whose registered office is

Charter House
33 Greek Street
Stockport
Cheshire
SK3 8AX

company registration number **03163207**

to operate an installation at

Quat-Chem Limited
4 Dodgson Street
Rochdale
Lancashire
OL16 5SJ

to the extent set out in the schedules.

The notice shall take effect from 02/06/2014.

Name	Date
C G Morris	02/06/2014

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit EPR/BP3630FS/V002 as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/BP3630FS

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BP3630FS/V002 authorising,

Quat-Chem (“the operator”),
whose registered office is

Charter House
33 Greek Street
Stockport
Cheshire
SK3 8AX

company registration number **03163207**

to operate an installation at

Quat-Chem Limited
4 Dodgson Street
Rochdale
Lancashire
OL16 5SJ

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

Name	Date
C G Morris	02/06/2014

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated in accordance with the Low Impact Installation criteria specified in the Environment Agency’s Environmental Permitting application form at the time the permit application was duly made.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.2 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

- 2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.3A have been completed.
- 2.5.2 The operations specified in schedule 1 table S1.3B shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions of substances not controlled by emission limits

- 3.1.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.1.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.1.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.2 Odour

- 3.2.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.3 Noise and vibration

- 3.3.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.3.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report shall include as a minimum, a review of the results of the actual and anticipated operation of the installation against the low impact criteria issued by the Environment Agency at the time of the review.

4.3 Notifications

- 4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
- (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;

- (b) in the event of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.
- In any other case:
- (a) the death of any of the named operators (where the operator consists of more than one named individual);
 - (b) any change in the operator's name(s) or address(es); and
 - (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.4 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.5 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
S4.1 A1 (a)(iv) producing organic chemicals such as organic compounds containing nitrogen	Manufacturing a quaternary ammonium compound;	From receipt of raw materials to despatch of final product
S4.1 A1 (a)(ii) producing organic chemicals such as organic compounds containing oxygen	Manufacturing of polymethacrylic acid	From receipt of raw materials to despatch of final product and disposal of vessel washings

Table S1.2 Improvement programme requirements		
Reference	Requirement	Date
1	The plant shall be commissioned in accordance with the commissioning plan agreed with the Environment Agency. The operator shall provide a commissioning report recording performance. The report shall include confirmation that reactor cooling and heat transfer is capable of maintaining the reaction under control under all operational conditions. Plant operation shall not recommence until the report has been approved in writing by the Environment Agency.	4 months

Table S1.3A Pre-operational measures	
Reference	Pre-operational measures
1	The operator shall submit a report detailing how the activity will be designed, installed and operated to meet the low impact criteria. In particular this shall detail how an exotherm excursion will be prevented without reliance on significant management effort. No activity, including commissioning, shall commence until the report has been approved in writing by the Environment Agency. The activity shall be operated in accordance with the report approved in writing by the Environment Agency unless otherwise agreed in writing by the Environment Agency.
2	The operator shall submit drawings and carry out a risk assessment on the site drains and the links to the sewers and storm drainage systems for approval by the Environment Agency.
3	The operator shall submit a detailed design and commissioning plan for the activity which shall include a timetable. No activity, including commissioning, shall commence until the report has been approved in writing by the Environment Agency. The activity shall be commissioned in accordance with the plan approved in writing by the Environment Agency unless otherwise agreed in writing by the Environment Agency.
4	The operator shall supply a report of the integrity of the containment systems such as bunds. This report will demonstrate that the systems have been fully leak tested to ensure that in the event of a spill, liquids will be prevented from being released into the environment. No activity including storage shall commence until the report has been approved in writing by the Environment Agency.

Table S1.3B Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
1	Benzyl chloride storage tank	<p>The operator shall submit a report demonstrating that the bulk liquid storage tanks, pipelines and secondary containment have been leak-tested with details of the process control system. The bulk storage tank shall not be used until the report has been approved by the Environment Agency.</p> <p>The benzyl chloride bulk storage tank shall be brought into service and operated in accordance with the report approved in writing by the Environment Agency unless otherwise agreed in writing by the Environment Agency.</p>

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
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Schedule 3 – Emissions and monitoring

There are no emission limits or associated monitoring requirements.

Schedule 4 - Reporting

There is no reporting under this schedule.

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall 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 EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification 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 which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

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

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

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

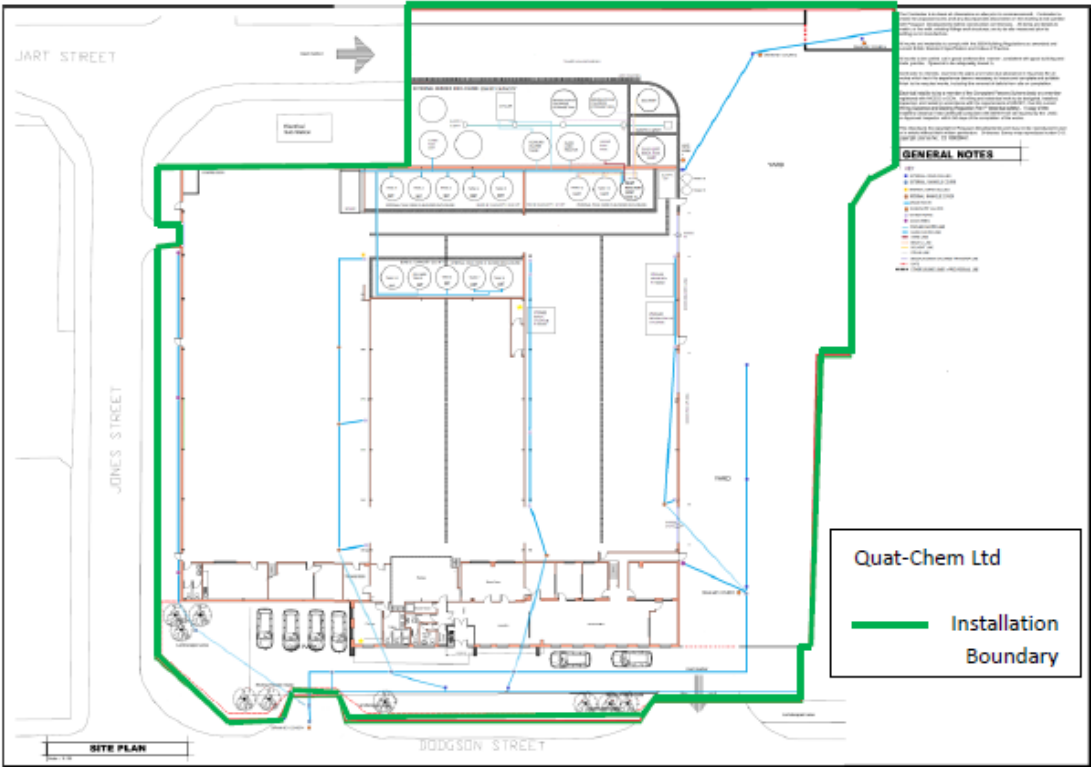
“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit..

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“year” means calendar year ending 31 December.

Schedule 7 - Site plan



END OF PERMIT