

Permitting decisions

Variation

We have decided to grant the variation for Kidderminster Acrylic reactor operated by Ashland Specialties UK Limited.

The consolidation and variation number is EPR/YP3432CJ/V002.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account.

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- summarises the decision making process in the <u>decision checklist</u> to show how all relevant factors have been taken into account

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice. The introductory note summarises what the variation covers.

Key issues of the decision

We carried out an audit of the applicant's submitted Air Quality Assessment Modelling associated with emissions of Oxides of Nitrogen (NOx) and Volatile Organic Compounds (VOCs) that did not screen out initially as insignificant. The applicant has stated that although the plant production capacity will rise from 8000 tpa acrylic resins to approximately 9300 tpa with the addition of the new reactor and associated equipment, reaction times scheduling will be used to ensure the Thermal oxidiser that abates both reactor lines is not overloaded. The emission concentration will therefore remain the same whilst mass emissions may rise. A theoretical worst case of both the reactor lines operating was modelled.

We carried out a number of sensitivity checks to ensure the conclusions are not critically dependent on the applicant's choice of data and assumptions.

These include sensitivity to:

Surface roughness

Possible higher concentrations of VOCs from the Thermal Oxidiser

Terrain data

Building dimensions and detailed modelling of carbon monoxide emissions.

Although we do not fully agree with the numerical values in the submitted modelling, we do agree with the conclusion that exceedances are unlikely at both human and ecological receptors.

Although this variation will potentially increase site acrylic process capacity the use of two reactors can also lead to longer campaigns with fewer product changes with only a marginal increase in waste disposal. There is no intention to increase discharges to ground or water.

- 2. The previous permit ELVs have been transposed into the modern template tables with clarification of monitoring frequencies and methods where appropriate. Any Operating Technique references from the original permit or variations have been retained in Table S1.2. There is no change in the ELV for emission point A1 because although the Thermal Oxidiser now abates the vents from both reactor systems they will be scheduled so that the maximum emission concentrations in their cycles do not overlap.
- Energy use parameters that were previously defined as entries in the monitoring data reporting table
 are now only included in the reporting form and referenced via the Performance Parameters table
 \$4.3.

Decision checklist

| Aspect considered | Decision | |
|--------------------------------------|--|--|
| Receipt of application | | |
| Confidential information | A claim for commercial or industrial confidentiality has not been made. | |
| Identifying confidential information | We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on confidentiality. | |
| Consultation/Engagement | | |
| Consultation | The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. | |
| | We consulted with Public Health England, the local Director of Public Health, the local Environmental Health Department and the Health and Safety Executive. | |
| | Where a response was received it is described in the Consultation section below | |
| | The application was publicised on the GOV.UK website. | |
| | No responses from the public were received. | |
| The facility | | |
| The regulated facility | We considered the extent and nature of the facilities at the site in accordance with RGN2 'Understanding the meaning of regulated facility' | |

| Aspect considered | Decision | | |
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| | and Appendix 2 of RGN 2 'Defining the scope of the installation'. | | |
| | The extent of the facilities are defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit. | | |
| | This permit applies to only one part of the installation – the production of acrylic resins. This is not a multi-operator installation because the permit relating to other activities on the site (Kidderminster Adhesive Plant) is also currently operated by Ashland Specialties UK Limited. | | |
| The site | | | |
| Extent of the site of the facility | The operator has provided a plan, which we consider is satisfactory, showing the extent of the site of the facility including the location of the part of the installation to which this permit applies on that site. The plan is included in the permit. | | |
| Site condition report | The operator has provided a description of the condition of the area covered by the extension to the installation boundary, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive. | | |
| | The original permit for the Kidderminster acrylic reactor was issued as BJ6844IT on 17/07/01. | | |
| | The area of increase in installation boundary proposed by this variation EPR/YP3432CJ/V002 was covered under Kidderminster Phenol reactor permit (same operator) EPR/YP3132CV from issue in 31/10/06 until its surrender in Jan2017. 6 boreholes were sunk on site in relation to other activities in 2000. Reportedly no analytes relevant to this permit were found. | | |
| | Although this variation will potentially increase site acrylic process capacity there is no intention to increase discharges to ground or water. | | |
| Biodiversity, heritage, landscape and nature conservation | The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. | | |
| | 3 SSSIs: Devil's Spittleful, Wilden Marsh and Meadows and River Stour Flood Plain. | | |
| | Local Nature Rerserves: Spennels Valley and Burlish Top. Local Wildlife Sites: Staffrodshitre and Worcestershire Canal, River Stour, Vicarage Farm Heath, Wilden meadows and Burlish Camp | | |
| | We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process. | | |
| | We carried out an audit of the applicant's submitted Air Quality Assessment Modelling including the potential impact on ecological sites including sensitivity testing to some sites in the list above that had been omitted from the modelling. Although this variation will potentially increase site acrylic process capacity there is no intention to increase discharges to ground or water. | | |
| | We consider that the application will not significantly affect any sites of | | |

| Aspect considered | Decision | | |
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| | nature conservation, landscape and heritage, and/or protected species or habitats identified. | | |
| | We have not consulted Natural England on the application. The decision was taken in accordance with our guidance. | | |
| Environmental risk assessment | | | |
| Environmental risk | We have reviewed the operator's assessment of the environmental risk from the facility. | | |
| | The operator's risk assessment is satisfactory. | | |
| | See Key Issues. | | |
| Operating techniques | | | |
| General operating techniques | We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility. | | |
| | The techniques used are not changed by this variation. See Key Issues. | | |
| | The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit. | | |
| Permit conditions | | | |
| Updating permit conditions during consolidation | We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit(s). | | |
| Use of conditions other than those from the template | Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template. | | |
| Raw materials | We have not specified limits and controls on the use of raw materials and fuels. | | |
| | The pre-consolidation permit Table 2.2.1 contained references to the parts of the original application and Schedule 4 notice response relating to use of raw materials. These have been included in Operating Techniques Table S1.2 but there are no separate raw materials specifications to be included in Table S2.1. | | |
| Emission limits | No emission limits have been added, amended or deleted as a result of this variation. | | |
| | See Key Issues | | |
| Monitoring | Monitoring has not changed as a result of this variation. | | |
| | See Key Issues | | |
| Reporting | Reporting has not changed as a result of this variation. | | |
| | See Key Issues | | |

| Aspect considered | Decision | |
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| Operator competence | | |
| Management system | There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions. | |
| | This variation permit the use of additional equipment to increase production capacity but the range of products and methods employed and the monitoring of emissions will not change. | |
| Growth Duty | | |
| Section 108 Deregulation Act 2015 – Growth duty | We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. | |
| | Paragraph 1.3 of the guidance says: | |
| | "The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation." | |
| | We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections. | |
| | We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards. | |

Consultation

The following summarises the responses to consultation with other organisations and our notice on GOV.UK for the public, and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received from

Worcestershire Regulatory Services

Brief summary of issues raised

No fundamental change to the environmental risk other than an increase in production capacity so no adverse comments to make.

Summary of actions taken or show how this has been covered

None required.

Response received from

Public Health England

Brief summary of issues raised

- Recommendation that any environmental permit issued for the site should contain conditions to
 ensure that the potential emissions do not impact upon public health: point source and fugitive
 emissions to air; and emissions of odour.
- 2. Recommendation that the determining officer consult with EA local officers and the local authority to establish whether there have been any odour complaints related to the installation.
- 3. The respondent also requested additional information to assist with their assessment of potential risks to public health:
 - Results of the detailed modelling for NOx and VOCs.
 - Salient conclusions for the EA technical audit of the detailed modelling.
- 4. The results of the technical audit were sent with an explanation that the need for us to carry out significant sensitivity testing rendered the original application modelling results potentially misleading. The consultee confirmed they then had no further comments.

Summary of actions taken or show how this has been covered

- 1. The modern template consolidated permit issued contains the same emission limit values for emissions to air as before the variation. It also contains template conditions relating to prevention and minimisation of fugitive and odour emissions.
- 2. We have consulted with Worcestershire Regulatory Service (see above). Out local officer team has recorded no recent verified odour complaints relating to the site.
- 3. We sent a summary of the conclusions from EA technical audit of the detailed modelling of emissions to air to the respondent. Although we do not fully agree with the numerical values in the submitted modelling, we do agree with the conclusion that exceedances are unlikely at both human and ecological receptors.