

Permitting decisions

Variation

We have decided to grant the variation for Global Metal Finishers Blakenhall Facility operated by Global Metal Finishers Limited.

The variation number is EPR/XP3335KT/V002.

We have also carried out an Environment Agency initiated variation to the permit.

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 [decision checklist](#) to show how all relevant factors have been taken into account
- explains why we have also made an Environment Agency initiated variation
- shows how we have considered the consultation responses

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

1) Air Quality - Emissions to air

The applicant's assessment of the impact of air quality is set out in Section 9 of the Supporting Information document (Document ref: P2447/R002, dated November 2016) of the application. The assessment comprised a screening assessment using the Environment Agency screening tool of emissions to air from the operation of the zinc plating plant. Despite the emissions of short term PM₁₀ not screening out, air dispersion modelling was not undertaken by the applicant. We have therefore used the in-house Environment Agency Air Quality Monitoring and Assessment Unit (AQMAU) screening tool version 5.2 to model the potential impacts of the air emissions from the zinc plating plant impact upon human health in more detail.

The AQMAU screening tool was used to check the impacts from PM₁₀ from Stack A7 and Stack A8. The following conservative assumptions were made:

- The AQMAU screening tool can model one building at a time. The zinc plating plant building is the nearest building to the stacks, centred at grid reference SO 90956 97207 (390956, 297207), width 16m, length 49m, height 9m and 10° angle to north. This should give a worst case downwash and over predict impacts.
- Normalised emission concentrations (wet gas) were provided. These were corrected to the stack exit temperature of 23 °C and 27 °C. The actual oxygen and moisture concentrations were not provided but just correcting for the temperature should give a conservative emission rate.
- The model used meteorological data for Upper Severn Area where the site is located.

The emission stacks A7 and A8 were screened with the following input parameters:

Table 1: Input parameters

	Stack A7	Stack A8
Flue diameter	0.5m	0.5m
Stack height (from ground level)	7.5m	7.5 m
Adjacent Building heights	9m	9m
Flue nominal load temperature	23°C	27°C
Exit velocity in m/sec	11.66m/sec	8.21m/sec
PM ₁₀ (dust) concentration in mg/Nm ³	0.68mg/Nm ³ (wet gas)	0.62mg/Nm ³ (wet gas)
The exact grid reference of the stacks	SO 90954 97230 (390954, 297230)	SO 90955 97232 (390955, 297232)
The exact grid reference of the centre of the installation	SO 90930 97210	

Our modelling predictions are presented in Table 2 below:

Table 2: Results of modelling assessment

Pollutant	ES / EAL		Back-ground	Process Contribution¹ (PC)		Predicted Environmental Concentration (PEC)	
	mg/m³			mg/m³	% of EAL	mg/m³	% of EAL
PM ₁₀	40	1	15.4	0.18	0.45	15.58	38.95
	50	3	30.8	0.5	1	31.3	62.6

1 Annual Mean

3 90.41st %ile of 24-hour means

[note1] Where the PC is demonstrated to be less than 1% of the long term ES and less than 10% of the short term ES, a level below which we consider to indicate insignificant impact, examination of the background concentration and PEC is not required. For the assessment of short term impacts, the PEC is determined by adding twice the long term background concentration to the short term process contribution.

The above assessment is considered to represent a worst case assessment in that: -

- It assumes that the plant emits dust continuously.
- It assumes all dust particles emitted are below either 10 microns (PM₁₀) or 2.5 microns (PM_{2.5}), when some are expected to be larger.

The above assessment shows that the predicted process contribution for emissions of PM₁₀ is below 1% of the long term ES and below 10% of the short term ES and so can be screened out as insignificant. Therefore we consider the operators proposals for preventing and minimising the emissions of particulates to be BAT for the installation. We are satisfied that the submitted air quality assessment is accurate. With the H1 methodology and the screening tool, we agree with the operators conclusion that there will not be a breach of any air quality limit values and objectives, at the assessed receptors resulting from the operation of the zinc plating plant.

2) Impact on Habitat sites, Sites of Special Scientific Interest (SSSIs), non-statutory conservation sites etc.

Sites Considered

The following Habitats (i.e. Special Areas of Conservation, Special Protection Areas and Ramsar) sites are located within 10km of the Installation:

- Fens Pools - Special Area of Conservation

There are no Sites of Special Scientific Interest within 2km of the proposed Installation. No further assessment is required.

The following non-statutory local wildlife and conservation sites are located within 2 km of the Installation:

- Muchall Grove Wood (Local Wildlife Site, LWS)
- Penn Road/Goldthorn Road Open Space (LWS)
- Park Hill (LWS)
- Merridale School Bog (LWS)
- Jeremy Road (LWS)
- Colton Hills (land east of) (LWS)
- Marnel Drive Wood (LWS)
- Merridale Cemetery (LWS)
- Merridale School (LWS)
- Park Hill North (LWS)
- Sedgley Beacon (LWS)
- Park Hill South (LWS)
- Taylor Road (LWS)
- Ashen Coppice (LWS)
- Birmingham Canal, Wolverhampton Level (LWS)
- Park Coppice (LWS)
- Monmore Green Disused Railway (LWS)
- Colton Hills (LWS)
- Park Coppice (Ancient Woodland)
- Ashen Coppice (Ancient Woodland)

The screening process for protected conservation areas is limited to the emissions and emission periods in the environmental standards for protected conservation areas, as detailed in the Environment Agency Web Guide for Air Emissions Risk Assessment. Particulate Matter (PM) is not detailed as an emissions that affects SACs within this guide and therefore the impact of the PM emissions on the habitat sites is considered

insignificant. The site is approximately 8km from the SAC. We consider that the application will not affect the features of the site/species/habitat. The predicted short-term and long-term process contribution for emissions of PM₁₀ is less than 100% of the ES and the predicted long-term process contribution for emissions of PM_{2.5} is less than 100% of the ES. Therefore all emissions can be screened out as insignificant in relation to their impact on non-statutory local wildlife and conservation sites.

3) Particulate matter emission limit

The zinc plating plant is already in operation and monitoring results show the particulate matter emissions are significantly below the limit of 50mg/m³ set in the Technical Guidance Note for The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (EPR 2.07). We have therefore set a tighter limit of 30mg/m³ for particulate matter, this is in line with the emission limits already included within the permit for the other treatment lines. We have included the requirement for 6 monthly monitoring.

4) Environment Agency initiated variation

We have also carried out an Environment Agency initiated variation to implement the requirements of the European Union Directive on Industrial Emissions. This variation incorporates the changes required by the Industrial Emissions Directive (IED), including the amendment of the wording of several permit conditions relating to notifications, and also includes the addition of a condition relating to a requirement for monitoring of groundwater and soil. The scheduled activity reference for the Section 5.3 A (1) (c) (ii) activity in table S1.1 has been amended to 5.4 A (1) (a) (ii).

Soil and Groundwater Monitoring

As a result of the IED requirements all permits must now have condition 3.1.3 relating to groundwater monitoring. However, the Environment Agency's Guidance states that it is only necessary for the operator to take samples of soil or groundwater and measure levels of contamination where the evidence that there is or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard; or
- The environmental risk assessment has identified that the same contaminants are a hazard and your risk assessment has identified a possible pathway to land or groundwater.

Guidance further states that it is not essential for the Operator to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

We have also amended Conditions 4.3.1 and 4.3.2, Schedule 6 – Notifications and Schedule 7 – Interpretation.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made. The decision was taken in accordance with our guidance on confidentiality.
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	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. The comments and our responses are summarised in the consultation section .
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. The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, 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.
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. 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 consider that the application will not affect any sites of 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.

Aspect considered	Decision
	<p>The operator's risk assessment is satisfactory.</p> <p>The applicant has detailed in the variation application that the upgrade to the effluent treatment plant (ETP) has not introduced any additional treatment, discharge points or determinands and as such, a risk assessment to foul sewer is considered not necessary. The upgraded ETP has been designed to treat the effluent to a higher standard with better segregation of the effluent streams. Thus there are no changes to the emissions to water.</p> <p>Please refer to the key issues section above regarding emissions to air.</p>
Operating techniques	
General operating techniques	<p>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.</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
Operating techniques for emissions that screen out as insignificant	<p>Emissions of particulate matter have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.</p> <p>We consider that the emission limits included in the installation permit reflect the BAT for the sector.</p>
Permit conditions	
Changes to the permit conditions due to an Environment Agency initiated variation	We have varied the permit as stated in the variation notice.
Emission limits	<p>ELVs have been added for the following substances.</p> <p>Particulate matter</p> <p>We have imposed a stricter ELV than that required by BAT in respect of particulate matter, see <u>key issues</u>.</p>
Monitoring	<p>We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:</p> <p>Particulate matter</p> <p>These monitoring requirements have been imposed in order to ensure that emissions of particulate matter meet the emission benchmarks in our guidance on 'The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes' (EPR 2.07) dated March 2009.</p> <p>We made these decisions in accordance with Technical Guidance Note M2: Monitoring of stack emissions to air Version 11 dated November 2015.</p>
Reporting	We have added reporting in the permit for the following parameters:

Aspect considered	Decision
	<p>Particulate matter.</p> <p>We made these decisions in accordance with our guidance on 'The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes' (EPR 2.07) dated March 2009.</p>
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.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>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.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“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.”</p> <p>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.</p> <p>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.</p>

Consultation

The following summarises the responses to consultation with other organisations, 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
Health & Safety Executive
Brief summary of issues raised
No comments on the proposal.
Summary of actions taken or show how this has been covered
N/A – no comments raised.

Response received from
City Of Wolverhampton Council (Local Authority)
Brief summary of issues raised
The Local Authority (LA) confirmed that they had not received any complaints in relation to the installation and that there are no matters of noise or amenity that the LA were aware of which may affect our determination. The LA confirmed that there had been no enforcement action taken against the company.
Summary of actions taken or show how this has been covered
N/A – no action required.

Response received from
Public Health England (PHE)
Brief summary of issues raised
PHE recommend that any environmental permit issued for this site should contain conditions to ensure that particulates do not impact upon public health. PHE have no significant concerns regarding risk to health of the local population from this proposed activity, providing that the applicant takes all appropriate measures to prevent or control pollution, in accordance with the relevant sector technical guidance or industry best practice.
Summary of actions taken or show how this has been covered
We have undertaken more detailed monitoring on the potential impacts of the air emissions from the zinc plating plant upon human health. We are satisfied that the submitted air quality assessment is accurate. With the H1 methodology and the screening tool, we agree with the operators conclusion that there will not be a breach of any air quality limit values and objectives, at the assessed receptors resulting from the operation of the zinc plating plant. We have also included an emission limit within the permit for particulate matter that is tighter than the BAT limit. Please refer to the key issues section above for further details on our assessment of particulate matter.