Permitting decisions

Variation

We have decided to grant the variation for The Brock Metal Company Limited operated by The Brock Metal Company Limited.

The variation number is EPR/MP3936UJ/V009.

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
- 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

The variation increases the melting capacity of the installation from 80t to 120t. The following changes are proposed:

1. Replace nine 5t capacity crucibles with 7t capacity crucibles, five 5t capacity crucibles with 6.5t capacity crucibles
2. Add an 18t reservoir

1. The proposal of replacing the crucible with the larger version will not change the environmental risks associated with their process. This is because the larger capacity crucibles will use the same technology, the same materials, the same design principles and the same operational control methods as the current crucibles. Due to this, the operating techniques will not change.

Should a crucible fail in service the environmental consequences are considered minimal. Most failures begin with small beads of zinc emerging through a crack onto the furnace-facing surface of the crucible. This zinc is oxidised to zinc oxide by the burner, producing a slight mistiness. The furnace operator will either stop the melting or cast it immediately. In the rare instances where significant quantities of molten metal leak into the furnace well, it will exit the well through a run-out hole at the base of the furnace onto the concrete floor of the foundry. Foundry sand is used to help control any such flow and the metal is allowed to solidify on the floor from where it can be lifted and returned to the process.

Crucibles have a limited life and are subject to daily inspection. They are replaced when the set lifetime is reached, even if they show no sign of failure. This limits the number of instances where crucibles fail.

2. The reservoir is lined with 20mm of very high-performance insulation against the steel followed by a layer of castable refractory material. In the event of a crack that would propagate all the way through the refractory lining, its thickness is such that any molten zinc permeating along the crack reaches its solidification temperature before it contacts the high-performance insulation.

   The reservoir will be installed in a shallow pit (approximately 500mm deep) in the floor which will both offer bund capacity and reduce the volume of molten metal above floor level. In the event that a crack is formed and it cannot be cast, 1 tonne block moulds are stored near the reservoir to allow its entire contents to be rapidly pumped out into them. The risk of zinc leaking from the reservoir is therefore considered to be extremely low.

   The reservoir is fitted with two small burners hence, it is classed as a furnace rather than a holding vessel.

Emissions

There are no additional point source emissions from the installation.

The installation has limited fugitive emissions, these being reported as constantly under the health and safety limits. It is not considered that the variation will cause a significant increase in fugitive emissions.

The applicant expressed their desire to keep the surface water emission point W1, as it was due to be removed. This is used only in case of emergency shutdown of the new rotary casting equipment. This variation does not technically change the emission point. A monitoring requirement has been added for volume to be reported at the end of the year.

Biodiversity

The site is within screening distance of habitats sites:

- Cannock Extension Canal SAC (UK0012672) is 730m away
- Cannock Chase SAC (UK0030107) is 6630m away
- Cannock Extension Canal SSSI is 727m away.
- Chasewater And The Southern Staffordshire Coalfield Heaths SSSI is 1120m away.

The variation does not increase's site emissions. A Stage 1 Habitats Regulations Assessment has been generated and sent to Natural England for information only. A CRoW Appendix 4 has been generated and saved to EDRM. Natural England has not been consulted on this occasion.

Considering the justification provided, we are satisfied that the variation will not have a significant impact on the environment.

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.
Consultation/Engagement	
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. We consulted the following organisations: – Public Health England – Local Authority – Planning – Local Authority – Environmental Health – Health and Safety Executive The comments and our responses are summarised in the consultation section.
The site	
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 due to their lack of emissions. We have sent our assessment to Natural England for information only.
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.
Operating techniques	

Aspect considered	Decision
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 operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.
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	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, 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
Cannock Chase Council
Brief summary of issues raised
No adverse comments relating to this application
Summary of actions taken or show how this has been covered
N/A

Response received from
Public Health England
Brief summary of issues raised
Comments have been received regarding the lack of clarity in terms of proposed capacity increase.
Summary of actions taken or show how this has been covered
Clarifications have been requested to address the various contradictions.