# Decision document new bespoke Permit

We have decided to grant the permit for Zinc Oxide Production Facility operated by FBM Zinc Limited.

The permit number is EPR/GP3702PD.

The permit is for a zinc oxide production facility which accepts zinc scrap/dross that it melts and vaporises to produce zinc oxide.

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 considerations section to show how the main relevant factors have been taken into account
- highlights key issues in the determination
- 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.

# Key issues of the decision

**Monitoring of emissions**

The Applicant stated that an annual monitoring frequency is appropriate for site emissions.

This is based on:

- the process being similar to a non-ferrous metal process and for low risk sites annual emission monitoring is deemed to be an appropriate monitoring frequency in the relevant BAT conclusions.
- the process includes continuous process monitoring including flow rates, temperature and pressure as surrogates for detecting system instability and abatement system (bag filter) failure.
- the process is operationally stable and consistent, therefore the emissions should be consistently maintained.

On this basis they concluded that annual air emission monitoring should be sufficient.

We have reviewed the operator's process and agree with the argument made, however this site is permitted as a chemical sector process, although some aspects are reflective of a non-ferrous metal process. The process also takes secondary/waste metals as feed materials.

We have reviewed the process in line with the requirements of these two sectors (chemicals and non-ferrous metals) and agree that annual monitoring will be appropriate on the basis:

- The environmental risk is considered low in that the emissions screen out as insignificant at sensitive receptors.
- Despite the process being defined as a chemical process, the infrastructure used in the process is more closely reflective of pyrometallurgical infrastructure used in non-ferrous metal processes.
- The process meets BAT for a zinc oxide chemical process and a non-ferrous melting process.
- The process is controlled and operated in a stable and consistent manner.
- The operator will put continuous process monitoring in place to optimise the process, to monitor robust surrogate parameters to ensure consistency is maintained across the process, exhausts and abatement systems and to highlight any deviations and malfunctions.
- Bag filters are relative consistent abatement systems and leak detection is in place.

To ensure this is the case in practice we have included Preoperational Condition 1 and Improvement Condition IC6 in the permit requiring the operator to provide evidence to justify the frequency of monitoring. That evidence will allow us to ensure that in practice the appropriate monitoring provisions are in place to ensure compliance, consistency of the process and detection of malfunctions.

# Decision considerations

## 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

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Director of Public Health and Public Health England
- Food Standards Agency
- Local Authority – Environmental Health – North East Lincolnshire
- Health and Safety Executive

The comments and our responses are summarised in the consultation responses section.

## Operator

We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.

## 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’, Appendix 2 of RGN 2 ‘Defining the scope of the installation.

The extent of the facility is defined in the site plan and the permit. The activities are defined in table S1.1 of the permit.

## The site

The operator has provided plans which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points.

The plans show 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 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.

## Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

## Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator’s risk assessment is satisfactory.

## Environmental risk

## Climate change adaptation

We have assessed the climate change adaptation risk assessment.

We consider the climate change adaptation risk assessment is satisfactory.

## Operating techniques

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

## General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes including:

- Inorganic speciality Chemical BREF
- EPR 4.03
- Non-ferrous metal BREF and BAT conclusions
- EPR 2.03

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.

## Operating techniques for emissions that screen out as insignificant

Emissions of particulates, zinc, nitrogen, sulphur dioxide, VOCs, chromium, copper, manganese, nickel and lead have been screened out as insignificant, and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

We consider that the emission limits included in the installation permit reflect the BAT for the sector.

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

## Waste types

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

## Pre-operational condition

Based on the information in the application, we consider that we need to include pre-operational condition 1. This condition requires the operator to submit to the Environment Agency for approval a monitoring programme for the stack emissions and the extraction and abatement process parameters. This programme will ensure an appropriate suite of representative monitoring data is collected in order to complete the requirements of the improvement conditions which involve the operator demonstrating that their air emissions are in line with those assessed in the application, their operational performance is in line with the BAT and the monitoring frequency is appropriate for this operation.

## Improvement programme

Based on the information in the application, we consider that we need to include an improvement programme. We have included an improvement programme to ensure that:

IC1 – The environmental performance of the plant as installed is in line with the design parameters set out in the application
IC2 – the operator reviews their options for a backup electrical supply to improve their site's ability to manage emissions during power outages
IC3 – The operator submits an updated Energy Efficiency Management system
IC4 – The operator demonstrates that the emissions from the stacks are in line with the emissions used in their application's air quality modelling
IC5 – The operator demonstrates that they can in practice meet the Chemical BREF process parameters
IC6 – monitoring frequency - see key issues section of this document

## Emission Limits

Emission Limit Values (ELVs) or equivalent parameters or technical measures based on Best Available Techniques (BAT) have been added for the following substances:

- Dust
- Zinc

We have included these limits based on the Emissions Limit Values outlined in the BAT conclusions for non-ferrous metal sites. We have applied the limits in this BREF despite the process being defined as a chemical process as the infrastructure used in the process is more closely reflective of pyrometallurgical infrastructure used in non-ferrous metal processes. Note these limits also reflect those in the chemical EPR guidance.

## Monitoring

We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.

We made these decisions in accordance with.

- Inorganic speciality Chemical BREF
- EPR 4.03
- Non-ferrous metal BREF and BAT conclusions
- EPR 2.03

Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.

## Reporting

We have specified reporting in the permit.

We made these decisions in accordance with

- Inorganic speciality Chemical BREF
- EPR 4.03
- Non-ferrous metal BREF and BAT conclusions
- EPR 2.03

## Management System

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

We only review a summary of the management system during determination. The applicant submitted their full management system. We have therefore only reviewed the summary points.

A full review of the management system is undertaken during compliance checks.

## Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

## 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 Responses.

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 Public Health England and North East Lincolnshire Council (Environment Protection Team).

Brief summary of issues raised: No significant concerns and satisfied with the information provided.

Summary of actions taken: no action required.