

Natural Resources Wales permitting decisions

The Royal Mint Substantial Variation Decision Document

EPR/KP3135KV/V005

Application for a Variation

The application number is: [EPR/KP3135KV/V005 \(PAN-016079\)](#)

The Operator is: The Royal Mint Limited

The Installation is located at: The Royal Mint, Llantrisant, Pontyclun, Rhondda Cynon Taf, CF72 8YT

The Royal Mint has made an application for a substantial variation to make the following changes to the permit:

[Brass Plating line](#)

The Royal Mint have applied to add a new brass plating line to the permit. The brass plating line will be located on the site of the now decommissioned nickel-plating line 2 in “building 12”. The main features of the site’s permit that will change as a result of the addition of the brass plating line:

- 1) Introduction of emissions to air of hydrogen cyanide (after it has been through a cyanide scrubber) through emission point A9.
- 2) Introduction of emissions to air of sulphuric acid, sulphur dioxide and sodium hydroxide through an acid scrubber (emission point A10).
- 3) Installation of a cyanide destruction plant to treat the cyanide solution prior to being treated at the effluent treatment plant. The operator proposed to use an ozone destruction technique in line with the relevant current best available techniques for surface treatment sector (published 2006). All process effluent is treated by the effluent treatment plant and discharge to sewer under a trade effluent consent which is to remain unchanged.

[Removal of the metal casting process and nickel plating line 2](#)

The variation will also remove references to nickel plating line 2 and the metal casting process (listed in the previous version of the permit as a S2.2A(1)(b) (melting and casting of metals activity)) and the associated emission point (A14). A14 was the only permitted source of particulate matter from the site.

[Site boundary increase to include combined heat and power facility](#)

The site boundary will increase to incorporate the land of the combined heat and power plant operated by Infinite Renewable Group Limited as a directly associated activity (DAA) permit ([EPR/CB3595HE](#)) to The Royal Mint.

We have decided to issue the variation for The Royal Mint operated by The Royal Mint Limited.

The variation number is **EPR/KP3135KV/V005**

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Table of contents
- Key issues
- Annex 2 the consultation, web publicising and responses

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Key issues of the decision

1 Our decision

Based on the information currently available to us we are currently minded to issue a permit to the Applicant. This would, if issued, allow it to operate the Installation, subject to the conditions in the Permit.

We consider that, in reaching that decision, we have taken into account all relevant considerations and legal requirements and that the permit will ensure that a high level of protection is provided for the environment and human health.

This Application is to operate an installation which is subject principally to the Environmental Permitting Regulations 2016 (EPR) and is subject to the requirements of the Industrial Emissions Directive (IED).

The permit contains many conditions taken from our standard Environmental Permit template including the relevant Annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the permit, we have considered the Application and accepted the details are sufficient and satisfactory to make the standard conditions appropriate.

This document should be read in conjunction with the application and supporting information and permit.

2 How we reached our decision

2.1 Receipt of Application

The application was accepted as duly made on 01/04/2022. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

The Applicant has made no claim for commercial confidentiality. We have not received information in relation to the application that appears to be confidential in relation to any party.

2.2 Consultation on the Application

We carried out consultation on the Application in accordance with the Environment Permitting Regulations (EPR), our statutory Public Participation Statement (PPS) and our Regulatory Guidance **RGN6**

We advertised the Application by a notice placed on our website, which contained all the information required by the EPR/IED, including advising people where and when they could see a copy of the Application. The consultation started **08/04/2022** and ended **12/05/2022**

A copy of the Application and all other documents relevant to our determination (see below) are available for the public to view. Anyone wishing to see these documents could arrange for copies to be made.

We sent copies of the Application to the following bodies, which includes those with whom we have “Working Together Agreements”:

- Health and Safety Executive
- Public Health Wales
- Rhondda Cynon Taf Borough Council - Planning Department
- Rhondda Cynon Taf Borough Council Environmental Health

These are bodies whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly.

Further details along with a summary of consultation comments and our response to the representations we received can be found in Annex 2. We have taken all relevant representations into consideration in reaching our determination.

2.2.1 Draft Permit Consultation

We carried out consultation on our draft decision. This consultation began on 16/12/2022 and ended on 18/01/2023.

2.3 Requests for Further Information

In order for us to be able to consider the Application duly made, we needed more information. We requested further information on the 23/03/2022 and received a response on the 01/04/2022 when we duly made the application.

Further information was also requested by way of a Schedule 5 Notice requiring assessment on the impacts of ozone from the cyanide destruction process. The first Schedule 5 Notice was sent on 27/06/2022 with a response date of 11/07/2022 (extended to 05/08/2022). The Applicant's response to the Schedule 5 Notice was provided on 04/08/2022. The additional information supplied satisfied the requirements of the Schedule 5.

A second Schedule 5 Notice requiring a noise impact assessment of the new proposal on the nearest residential receptor was sent on the 08/08/2022 with a response date of 05/09/2022 which was extended to 03/10/2022. Applicant's response to the Schedule 5 Notice was provided on 29/09/2022.

The third Schedule 5 Notice requiring a revised air impact assessment, to take into account emissions of copper, zinc and sulphur dioxide was sent to the applicant on the 09/09/2022. Applicant's response to the Schedule 5 Notice was provided on 22/09/2022.

A copy of the information notices and e-mails requesting further information were placed on our public register as were the responses when received.

3 The Legal Framework

The variation will be issued, under Regulation 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;

- subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which also have to be addressed.

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that this decision is consistent with its general purpose of pursuing the sustainable management of natural resources (SMNR) in relation to Wales, and applying the principles of SMNR. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in granting the Permit a high level of protection will be delivered for the environment and human health through the operation of the Installation in accordance with the permit conditions. NRW is satisfied that this decision is compatible with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources

4 The changes to the Installation

4.1 Description of the Installation and related issues

4.1.1 The changes to the permitted activities

The variation will make several changes to the activities listed in permit under Table S1.1. The variation removes the S2.2A(1)(b) melting and casting of metals activity from the Table S1.1 following the decommissioning of the line.

The new brass plating line will fall under existing permitted activity S2.3A(1)(a) Surface treatment of metals of environmental permitting regulation 2016.

Following the variation, the permit will list the following Schedule 1 activities and directly associated activities (DAAs) in Table S1.1 of the permit.

Schedule 1 activities

- S2.3A(1)(a) Surface treatment of metals unless falling within Part A(2) of this section, surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m³

- S5.4A(1)(a)(ii) Disposal, recovery or a mix of disposal and recovery of non-hazardous waste Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste-water treatment (ii) physico-chemical treatment;

Directly associated activities

- Discharge to surface water consisting of surface run off and non-contact (uncontaminated) cooling water.
- Annealing and burnishing
- Heat treatment of tool dies

Together, these listed and directly associated activities comprise the Installation.

There is also a combined heat and power that is permitted separately as a directly associated activity (DAA) permit (reference EPR/CB3595HE) and is operated by Infinite Renewables Group Limited. The DAA permit and operator are listed in the introductory note on the permit and variation notice.

4.1.2 The Site

As part of this variation, the Applicant has applied to extend the site boundary to include the area north west of the site to include The Royal Mint combined heat and power (CHP) facility (EPR/CB3595HE) operated by Infinite Renewables Group Limited. The Applicant has provided an updated site plan which we consider is satisfactory, showing the new installation boundary, and the installation boundary of the CHP (EPR/CB3595HE). This plan will be included in the permit and the Applicant is required to carry on the permitted activities within the site boundary.

The following conditions have been added to the permit as a result of the site being a multi-operator installation:

- 1.5.1 Where the operator notifies Natural Resources Wales under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator of the installation of the same information.
- 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. The area shown edged in red on the site plan represents the extent of the installation covered by that of the other operator of the installation.

Originally the applicant had also requested that the installation boundary was extended to also include the whole of the site's visitor centre. This was because the installation boundary in the 2010 variation (V003) was along the security fence which went through what is now the middle of the visitor centre. However we advised the Applicant that the visitor centre should not be included within the installation boundary as it does not have any association with the installation's activities. The Applicant agreed with our reasoning and send in a revised site plan.

4.1.3 Key Issues in the Determination

Our decision includes but is not limited to the following:

- Impacts of the additional emissions to air of small quantities of hydrogen cyanide, copper, zinc, sodium hydroxide, sulphuric acid, sulphur dioxide and ozone on human health.
- Impact of acid deposition on designated ecological sites as a result of the addition of emissions of sulphuric acid and sulphur dioxide.
- Secondary containment of new brass plating line including piping between the cyanide destruction facility and the effluent treatment plant.
- Potential noise impact from the new scrubbers and plant equipment on the nearby residential receptor.

4.2 The site and its protection

4.2.1 Assessment of site baseline condition report

The site condition report (SCR) for the land has already been assessed and found satisfactory as part of the determination for the CHP plant (EPR/CB3595HE). Details on this can be found under that applications decision document. The Royal Mint supplied a copy of this site condition report as part of their application to increase the site boundary to include the combined heat a power facility.

4.2.2 Proposed site design: potentially polluting substances and prevention measures

The applicant has outlined that the new production line and any associated storage tank will have secondary containment (bunds). The size of the containment have been determined using the Construction Industry Research and Information Association (CIRIA) C736 guidance on secondary containment. The main process will occur inside the building that was formally used for one of the nickel plating lines that was decommissioned.

The effluent from the brass plating line is transferred to the effluent treatment tank via piping over permeable ground. The Applicant has stated that the piping will comprise of an inner pipe and an outer pipe, with the outer pipe as the secondary containment.

We have reviewed the containment proposals in line with CIRIA C736 guidance and consider it satisfactory.

4.3 Operation of the Installation – general issues

4.3.1 Administrative issues

This permit applies to only one part of the installation. The names and permit numbers of the operators of other parts of the installation have been detailed in the permit's introductory note as part of this variation.

4.3.2 Management

The Operator has an environmental management system (EMS) which is accredited to ISO14001. The new activities from the brass plating line will be integrated into the Operators existing EMS. We are satisfied that appropriate management systems and management structures will be in place for this installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

4.3.3 Accident management

The Applicant has submitted an accident emergency management plan as part of their application with a revised version being sent in on the 26/07/2022. We have reviewed this plan and found it satisfactory. The site is also subject to Control of Major Accident and Hazard Regulation.

4.3.4 Operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes (EPR 2.07) and best available techniques for surface treatment.

The proposed techniques/ emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility.

We consider that the emission limits included in the permit reflect the BAT for the installation. The only limit that is beyond BAT is for sulphur dioxide which has set at the level that the applicant has assessed at. All other emissions are at the indicative BAT limits as set out in the relevant guidance (EPR 2.07).

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.

These are specified in the Operating Techniques table in the permit (Table S1.2). These include parts of the application supporting document that specifies the operation of the brass plating line and cyanide treatment plant and the accident management plan.

4.3.5 Energy efficiency

We are satisfied that the Applicant will ensure that energy is used as efficiently as possible. There will be a slight increase in electricity usage following the introduction of the brass plating line (by 5%) but this is due to decrease in the future with the planned decommissioning of the copper and zinc plating lines

The Operator is required to report energy usage under condition 4.2 and Schedule 4. The following parameters are required to be reported: Energy usage, natural gas usage and CO₂/Final Product tonnage This will enable Natural Resources Wales to monitor energy recovery efficiency at the installation.

5 Minimising the Installation's environmental impact

Regulated activities can present different types of risk to the environment, these include odour, noise and vibration; accidents, fugitive emissions to air and water; as well as point source releases to air, water, sewer and discharges to ground or groundwater, global warming potential and generation of waste. All these factors are discussed in this and other sections of this document.

For the variation of this installation the principle changes to emissions to air :

- Sulphuric acid
- Hydrogen cyanide
- Sodium hydroxide
- Ozone
- Copper
- Zinc
- Sulphur dioxide

The next sections of this document explain how we have approached assessing the likely impact of emissions from the installation on human health and the environment and what measures we are requiring to ensure a high level of protection.

We have reviewed the operator's assessment of the environmental risk from the facility. The assessment shows that, applying the conservative criteria in our

guidance on Environmental Risk Assessment or similar methodology supplied by the operator and reviewed by ourselves, all emissions may be categorised as environmentally insignificant.

We will discuss the operators risk assessment in more detail as follows:

5.1 Assessment of Impact on Air Quality

This section of the decision document deals primarily with the dispersion modelling of emissions to air from the stack and its impact on local air quality.

The site is not located in an air quality management area or an area identified in the Welsh Government's clean air plan.

The Applicant has assessed the Installation's potential emissions to air against the relevant air quality standards, and the potential impact upon human health. These assessments predict the potential effects on local air quality from Installation's stack emission, both existing and proposed.

The new process will result in emissions to air of sulphuric acid, sulphur dioxide, hydrogen cyanide, copper and zinc from the brass plating line and small fugitive emissions of ozone from the new cyanide destruction facility. These emission will be from the existing emission points A9 and A10. The applicant has proposed to add new scrubber to these emission points (replacing existing scrubbers) as part of this variation with a cyanide scrubber at A9 and an acid scrubber at A10.

There would be no change in emissions of NO_x and NH₃ from the site as a result of this variation. The variation will also remove emission point A14, the only permitted source of particulate matter from the site.

The air impact assessment and the dispersion modelling has assessed the maximum predicted emissions at the nearest receptors based on the installation operating continuously at the relevant long-term or short-term emission limit values, i.e. the maximum permitted emission rate. The assessment has taken into account all emissions from the installation, including emissions from the existing copper and

zinc plating lines which are due to be decommissioned and the new emissions from A9 and A10.

Human Health

The assessment identified the nearest receptors that could be impacted from the proposal.

Sodium hydroxide, hydrogen cyanide, sulphuric acid mist (in air), copper, zinc and ozone, were assessed by the applicant for the impacts on human health against the environmental assessment level (EAL) criteria as outlined on the Environment Agency's guidance [Air emissions risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit)

Sodium hydroxide

Sodium hydroxide at the source has an emission rate of less than 10 µg/m³ which screens out as <10% of the short term EAL for sodium hydroxide (200 µg/m³).

Hydrogen cyanide

The applicant modelled the concentration of hydrogen cyanide emissions at the BAT EAL of 5 mg/m³ from the site as a whole (including existing emission points) at all of the identified local receptors. The highest, predicted process contribution of hydrogen cyanide was 6.2% of the short term environmental assessment level of 220 µg/m³. As this is less than 10% of the short term EAL the emission screens out as insignificant and no further assessment was required.

Copper and Zinc

Emissions of copper and zinc screen out as less than 0.1% of the short term and long term environmental assessment levels for these substances therefore the emissions of copper and zinc screen out as insignificant (<10% of the short term EAL and <1% of the short term EAL).

Sulphuric acid

The maximum process contribution of sulphuric acid was modelled at all nearest receptors. The maximum predicted short term process contribution was 1.8% (5.4

µg/m³) of the short term EAL when all sources (including A3 and A7 which are due to be decommissioned) are included and screens out due to being <10% of the EAL.

The long term maximum predicted process contribution was 3.2% of the long term EAL (or 4.9% including points A3 and A7) for sulphuric acid and cannot be screened out as it represents more than 1 % of the relevant EAL. Sulphuric acid mist is not monitored in the UK and as such there is no background data. The applicant assessed that there are no other sources of sulphuric acid in the area and as such has taken the background to be 0 µg/m³. We are in agreement with the applicant's approach. The predicted environmental concentration (PEC) was therefore calculated to be 4.0% and as this is less than 100% of the EAL and the emission would therefore screens out as an insignificant emission.

We are in agreement with the modelling approach and conclusions. The assumptions underpinning the model have been checked and are reasonably precautionary. The way in which the Applicant used dispersion models, its selection of input data, use of background data and the assumptions it made.

5.2 Assessment of impact to surface and ground water

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent pollution of ground and surface water.

There are no changes to the permitted discharge to surface water as a result of this variation.

5.3 Emissions to sewer

The installation currently discharges to sewer through the effluent treatment plant. The Operator has stated that there will be no change to the discharge to sewer as a result of this variation. All cyanide effluent from the new brass plating line will be treated at the new cyanide destruction facility (using ozone) and is then treated further at the site's existing effluent treatment plant prior to discharge to sewer. The operator's choice of ozone for the cyanide destruction technique was in line with BAT for surface treatment and the guidance for surface treatment EPR 2.07.

5.4 Fugitive emissions

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise fugitive emissions and to prevent pollution from fugitive emissions.

The operator produces and uses ozone as part of the treatment of new cyanide prior to the effluent treatment process. The process is designed to stop if the limit above 1 ppm is detected.

The new planting lines will be located in the former nickel plating line building. All primary and secondary containment has been built in accordance to CIRIA C736. The applicant has assessed their bunding and submitted a bund risk assessment which we have reviewed and agreed as appropriate. There is a section of piping between the cyanide treatment plant and the effluent treatment plant that goes over permeable ground. The operator has proposed that the piping in this section comprises of an outer pipe and an inner pipe, with the outer pipe acting as secondary containment in the event that a leak occurs from the inner pipe.

5.5 Assessment of odour impact

The applicant assessed impact of potential odour from the new process. The new process uses chemicals that are already used on site. Given the nature of cyanide effluent the operator has measures in place to prevent large volume of emissions. All cyanide emissions are discharged through a scrubber after ozone destruction. The site also has ozone detection and steps in place to stop the process when ozone at or above 0.1 ppm is detected.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where not practicable to minimise the effects of odour.

5.6 Noise Assessment

A receptor located 40 meters to the north east of the installation boundary was identified as being a potential sensitive noise receptor. Given the close proximity of the receptor to the installation and the location of the two new scrubbers (associated with emission points A9 and A10) it was determined that a noise impact assessment was needed to assess the impact of the proposed variation and if the new scrubbers would lead to adverse impact.

A Schedule 5 Notification was sent out for the operator to perform a noise impact assessment of the proposal on the nearest residential receptor. The operator responded with a preliminary report which was assessed by our air and noise specialist team.

The preliminary noise impact assessment showed that the existing facility is +9dB over background which is indication of likely adverse impacts (depending on context). The applicant has acknowledged that this in their preliminary assessment and that a more in-depth study is required to determine the existing impact for the site.

We have decided to include an improvement condition on the varied permit (see Annex 1) which requires the operator to submit a noise impact assessment of the new scrubbers following commissioning. The operator will be required to ensure that there is no increase over the existing sound levels from the site and implement additional mitigation measures if an exceedance is identified. We decided this approach is appropriate in this instance for the following reasons:

- The site is existing and has been operational since 1968 and permitted as an installation since 2005.
- The previous noise complaints have been related to breakdown of equipment rather than a specific activity. The operator will conduct regular maintenance of the new equipment to prevent such breakdowns.
- The scrubbers located at points A9 and A10 are replacing existing scrubbers from the old nickel plating line located in that area. The operator has state the new equipment is designed to have low noise levels. The improvement

condition is to confirm that this is the case and the new scrubbers do not increase the noise impact from the site over the current existing levels.

- If the noise impact assessment submitted as part of the improvement condition shows any increase in noise over the established impact from the site the operator will have to put mitigation measures in place.
- The area is in a heavy industrialised area, with other commercial premises located close to both the Royal Mint and the receptor.

5.8 Impact on Habitats sites, SSSIs, non-statutory conservation sites etc

European Sites

One Natura 2000 site was identified within the risk screening distance of 10 km from the installation, Cardiff Beech Wood Special Area of Conservation (SAC).

A OGN 200 Habitat Regulation Assessment (HRA) Form 1 has been completed.

Assessment of Likely Significant Effect:

The project has been screened for likelihood of significant effects. However given that detailed modelling was submitted, as per our current process, the proposal was taken to appropriate assessment.

Appropriate assessment:

In light of the conclusions of an appropriate assessment, and taking account of the advice received from protected sites advisors, it has been established that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, taking into account any conditions or restrictions as applicable, either alone or in combination with other plans and projects. (As documented in section 4 of OGN 200 form 1, and section 5 if applicable).

HRA Overall conclusion:

In light of the conclusions of the appropriate assessment, it has been ascertained that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, as documented in section 4 of OGN 200 form 1, and section 5 if applicable. The local

environment team confirmed that they agree with our assessment as outlined in the form 2 response.

A copy of the HRA Form 1 and Form 2 are available on the public register.

SSSI Assessment

Two sites of special scientific interest (SSSI), Llanstrisant Common and Pastures SSSI and Rhos Tronyrefail SSSI, were identified within the 2 km risk screening distance of the installation.

A copy of the appendix 4 assessment for the SSSIs is available on the public register. The assessment concludes that for both SSSIs, that the proposed permission is not likely to damage any of the flora, fauna or geological or physiological features which are of special interest. The assessment was sent to the environment team for comment but no response was received within the 28 day deadline, therefore we have taken no comments as no concerns.

Non Statutory Sites Assessment

The following local wildlife site sites were identified within the 2 km risk screening distance from the site.

- Y Graig
- Llantrisant Common 1
- Garth Grabben Slopes
- Rhiwfelin Fawr
- Nant Muchudd
- Coedcae-mawr
- Pant-y-ddraenen
- Crofft-yr-haidd
- Marshy Grassland
- Coed Castellau
- Careau'r-Ilan Slopes

- Llantrisant Forest and Craig Melyn Woodland
- River Ely

There were also 44 ancient woodlands identified within 2 km risk screen distance from the installation.

The applicant did not include these sites in their air quality modelling. However, considering the modelling results for other receptors (such as the SSSI sites Rhos Tonyrefail and Llanstrisant Common and Pastures) located close to the emission source were shown to have a process contribution far below 100% of the environmental standard (maximum predicted concentration for SSSIs is 2%) it is reasonable to assume PC at the identified non-statutory sites will screen out as insignificant.

6 Setting ELVs and other Permit conditions

We have decided that emission limits should be set for the parameters listed in the permit.

We have set limit for cyanide of 5 mg/m³ in line with the guidance (EPR 2.07). We have set a limit for Sulphur dioxide of 0.6 mg/m³.

The applicant has assessed these emissions at these set limits for the impacts on human health and the environment (see sections 5.1 and 5.8 for more details). We are satisfied that these limits will be protective for both human health and the environment.

6.1 Translating BAT into Permit conditions

We have assessed the applicants proposal and emissions for the new process against the relevant BAT reference (BRef) document and the relevant guidance [EPR 2.07: The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes](#).

We are satisfied that the operator will meet the BAT limits in place.

As detailed in section 5.1, the environmental impact of the installation has been assessed against relevant EQSs, at the level of performance required by IED. The installation will not result in the breach of any EQSs. We accept that the applicant's proposals are indicative BAT.

6.2 Monitoring

We have decided that monitoring should be carried out for the parameters listed in Schedule 3 of the permit using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to demonstrate compliance with the emissions limits in the permit.

For emissions to air, the methods for continuous and periodic monitoring are in accordance with the Environment Agency's guidance for monitoring of stack emissions to air. We have set the monitoring requirements in line with the relevant guidance; [EPR 2.07: The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes](#). Based on the information in the application and the requirements set in the conditions of the permit we are satisfied that the monitoring techniques, personnel and equipment employed by the Operator will have either MCERTS certification or MCERTS accreditation as appropriate.

6.3 Reporting

We have specified the reporting requirements in Schedule 4 of the Permit to ensure data is reported to enable timely review by Natural Resources Wales to ensure compliance with permit conditions and to monitor the efficiency of material use and waste recovery at the installation.

7 OPRA

We have revised Applicant's submitted OPRA profile to reflect the changes to the site following the variation. The new OPRA score at the installation is 40. The OPRA score will be used as the basis for subsistence and other charging, in accordance with our Charging Scheme. OPRA is Natural Resources Wales method of ensuring application and subsistence fees are appropriate and proportionate for the level of regulation required.

ANNEX 1: Improvement Conditions

We have applied the following improvement conditions into the permit. Our reasoning for this is outline in detail in section 5.6

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP22a	The Operator shall undertake noise monitoring at the nearest local receptors. An addendum to the existing noise impact assessment for the site shall be submitted to Natural Resources Wales for approval. This shall: • Meet BS4142:2014+A1:2019 standards • Reference to the Welsh Government Noise and soundscape action plan 2018-2023 The Operator shall submit the revised noise impact assessment to Natural Resources Wales for approval.	Within 3 months after issuing of variation V005 or as otherwise agreed in writing with Natural Resources Wales
IP22b	Following completion of Improvement program requirement 22a, if the noise impact assessment demonstrates that the scrubber units for A9 and A10 and the cyanide treatment plant are causing an exceedance of noise level limit recommendations outlined in the noise impact assessment and modelling for IP22a, the Operator shall: • Implement suitable mitigation measures to ensure noise is not exceeding the noise limit recommendations • Complete a revised noise impact assessment following implementation of the mitigation measures to demonstrate the measures are effective The Operator shall submit the revised noise impact assessment to Natural Resources Wales for approval.	Within 6 months after issuing of variation V005 or as otherwise agreed in writing with Natural Resources Wales
IP23	The Operator shall submit a noise management plan including any mitigations proposed under improvement program IP22b (if applicable). This shall be completed in line with the current relevant guidance. The Operator shall submit the noise management plan to Natural Resources Wales for approval.	Within 6 months after issuing of variation V005 or as otherwise agreed in writing with Natural Resources Wales

ANNEX 2: Consultation Responses

A) Advertising and Consultation on the Application

The Application has been advertised and consulted upon in accordance with Natural Resources Wales Public Participation Statement. The way in which this has been carried out along with the results of our consultation and how we have taken consultation responses into account in reaching our draft decision is summarised in this Annex. Copies of all consultation responses have been placed on Natural Resources Wales public register.

1) Consultation Responses from Statutory and Non-Statutory Bodies

Response Received from Public Health Wales (09/05/2022)	
Brief summary of issues raised:	Summary of action taken / how this has been covered
Public health Wales are satisfied with the site on the basis that the environmental management system and emergency management plan are found by NRW to be up to satisfactory.	We have assessed the emergency management plan submitted with the application and the amended version submitted on the 27/06/2022.

2) Consultation Responses from Members of the Public and Community Organisations

a) Representations from Local MP, Assembly Member (AM), Councillors and Parish / Town / Community Councils

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A

b) Representations from Community and Other Organisations

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A

c) Representations from Individual Members of the Public

Response Received from	
Brief summary of issues raised:	Summary of action taken / how this has been covered
None	N/A