Environment Agency

Review of an Environmental Permit for an Installation subject to Chapter II of the Industrial Emissions Directive under the Environmental Permitting (England & Wales) Regulations 2016

Decision document recording our decision-making process following review of a permit

The Permit number is: EPR/BT0111IP
The Operator is: Irons Brothers, Limited
The Installation is: The Foundry, St Breock, Wadebridge, Cornwall, BL27 7JP
This Variation Notice number is: EPR/BT0111IP/V003

What this document is about

Article 21(3) of the Industrial Emissions Directive (IED) requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication by the European Commission of updated decisions on BAT Conclusions.

We have reviewed the permit for this installation against the revised BAT Conclusions for the non-ferrous metals industries sector published on 30 June 2016 in the Official Journal of the European Union. Where appropriate, we also considered other relevant BAT Conclusions published prior to this date but not previously included in a permit review for the installation. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator in the operation and control of the plant and activities of the installation. This review has been undertaken with reference to the decision made by the European Commission establishing best available techniques (BAT) conclusions (BATc) for the non-ferrous metals industries as detailed in the Official Journal of the European Union (L174) following a European Union, implementing decision (EU) 2016/1032 of 13 June 2016. It is our record of our decision-making process and shows how we have taken into account all relevant factors in reaching our position.

As well as considering the review of the operating techniques used by the operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

The introduction of new template conditions makes the permit consistent with our current general approach and with other permits issued to installations in this sector. Although the wording of some conditions has changed, while others have been deleted because of the new regulatory approach, it does not reduce the level of environmental protection achieved by the permit in any way. In this document we therefore address only our determination of substantive issues relating to the new BAT Conclusions.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

How this document is structured

1. Our proposed decision

2. How we reached our decision

3. The legal framework

4. Annex 1- Review of operating techniques within the installation against BAT Conclusions

5. Annex 2a - Review and assessment of derogation request(s) made by the operator in relation to BAT Conclusions which include an Associated Emission Level (BAT-AEL) value

6. Annex 2b - Consultation responses

7. Annex 3 - Improvement Conditions

8. Annex 4 - Review and assessment of changes that are not part of the BAT Conclusions derived permit review

9. Annex 5 – Priority compliance issues & detailed assessment of Regulation 60 notice responses where future action is likely

1 Our decision

We have decided to issue the variation notice to the operator. This will allow it to continue to operate the installation, subject to the conditions in the consolidated variation notice that updates the whole permit.

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

The consolidated variation notice 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 notice, we have considered the techniques identified by the operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate. This document does, however, provide an explanation of our use of "tailor-made" or installation-specific conditions, or where our permit template provides two or more options.

2 How we reached our decision

2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a notice under regulation 60(1) of the Environmental Permitting (England and Wales) Regulations 2010 (a Regulation 60 notice) on 16 December 2016 requiring the operator to provide information to demonstrate where the operation of their installation currently meets, or how it will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The notice required that where the revised standards are not currently met, the operator should provide information that

- Describes the techniques that will be implemented before 30 June 2020, which will then ensure that operations meet the revised standard, or
- justifies why standards will not be met by 30 June 2020, and confirmation of the date when the operation of those processes will cease within the installation or an explanation of why the revised BAT standard is not applicable to those processes, or

- justifies why an alternative technique will achieve the same level of environmental protection equivalent to the revised standard described in the BAT Conclusions.

Where the operator proposed that they were not intending to meet a BAT standard that also included a BAT Associated Emission Level (BAT-AEL) described in the BAT Conclusions Document, the Regulation 60 notice required that the operator make a formal request for derogation from compliance with that AEL (as provisioned by Article 15(4) of IED). In this circumstance, the notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 60 notice response from the operator was received on 02 April 2017.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review but not that it necessarily contained all the information we would need to complete that determination.

The operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 60 notice response that appears to be confidential in relation to any party.

2.2 Review of our own information in respect to the capability of the installation to meet revised standards included in the BAT Conclusions document

Based on our records and previous experience in the regulation of the installation we consider that the operator will be able to comply with the techniques and standards described in the BAT Conclusions. For the majority of the BAT Conclusions the operator has demonstrated that they currently operate in compliance with the requirements of the BAT Conclusions other than for those techniques and requirements described in BAT Conclusions 1, 3, 4 and 6. In relation to these BAT Conclusions, we agree with the operator in respect to their current stated capability as recorded in their Regulation 60 notice response and understand that they will be compliant before 30 June 2020 (the “compliance date”). We have therefore included improvement condition IC11 in the consolidated variation notice to ensure that the requirements of the BAT Conclusions are delivered before 30 June 2020.

2.3 Requests for further information during determination

Although we were able to consider the Regulation 60 notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information

request in the form of a Regulation 61 notice on 17 October 2017. A copy of the further information request was placed on our public register.

In addition to the response to our further information request, we received additional information and/or clarification from the operator, during the determination as follows:

- Responses to our email dated 04/12/2017, received 04/12/2017 and 06/12/2017, regarding waste types accepted at the site, confirmation that alloying is not undertaken at the installation and a revised plan showing location of emission points.
- Response to our email dated 29/01/2018, received 29/01/2018, regarding solvent consumption in the spray painting booth.

We made a copy of this information available to the public in the same way as the response(s) to our information request(s).

2.4 Surface Water Pollution Risk Assessment

As part of our delivery of the Water Framework Directive (WFD) requirements, we need to identify and assess the impact of all sources of hazardous pollutants to surface waters from regulated industry. We use the term 'hazardous pollutants' to collectively describe substances covered by the EQSD[1] (priority hazardous substances, priority substances and "other pollutants"). It also applies to the specific pollutants listed in the 2015 Directions[2], and substances which have operational (non-statutory) Environmental Quality Standards (EQS).

For all installations with discharges to surface water and/or sewer we required the operator, via our Regulation 60 notice, to undertake a surface water pollution risk assessment, in two stages, as follows:

a) Provide emissions data for the following hazardous pollutants: silver, arsenic, cadmium, cobalt, chromium (total), chromium (VI), copper, mercury, nickel, lead and zinc. The BAT Conclusions for the Non-Ferrous Metals Industries specify BAT-AELs associated with the direct discharge of these substances to surface water. We therefore considered that these substances potentially posed the highest risk from industry and listed them in our Regulation 60 notice. In addition, operators were required to identify and assess any other hazardous pollutants that may be present in their effluent. A full list of hazardous pollutants is included in our surface water pollution risk assessment guidance, which we 'signposted' operators to via the Regulation 60 notice.

[1] Environmental Quality Standards Directive (EQSD) (2008/105/EC, as amended by 2013/39/EU)
[2] The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015

b) Undertake a risk assessment using the above emissions data to determine whether any hazardous pollutants were liable to cause pollution of the downstream receiving waters. The WFD requires Member States to prior regulate, all substances in a discharge which are “liable to cause pollution”. Previously discharges from the Non-Ferrous Metals Industries were controlled on a “liable to contain” approach set by the Dangerous Substances Directive through either numeric limits, or descriptive conditions. Under the “liable to cause pollution” approach we would only consider applying numeric emission limits to those pollutants calculated to have the potential to cause pollution.

The risk assessment methodology uses a number of sequential screening steps to determine if a substance warrants detailed modelling and hence any emission limits being required, namely:

- Screen out insignificant emissions that do not warrant further investigation;
- Determine if significant load test is failed (for priority hazardous substances only);
- Decide if detailed modelling is needed;
- Assess emissions against relevant standards and set permit limits where considered necessary.

The methodology provides for undertaking assessments of both direct and indirect discharges to surface water, ‘indirect’ meaning that the effluent is discharged to foul sewer from the installation and is treated at a sewage treatment works (STW) prior to discharge to surface water. Treatment at the STW will remove a proportion of a discharged substance from the final effluent discharged to the environment. This removal needs to be taken into account when calculating the concentration of a hazardous pollutant which will be discharged to a receiving water via the sewage works. This is achieved by applying STRFs (sewage treatment reduction factors) within the screening steps.

In response to our Regulation 60 notice the operator confirmed that they do not use water in the process. There is no discharge to sewer and the only emission to surface water is uncontaminated surface water. There is therefore no discharge of hazardous pollutants, either directly or indirectly, to surface water. Based on our knowledge of the installation we are satisfied that the operator’s response is an accurate reflection of the situation at the site. We therefore consider that no further action is necessary.

2.5 Condition of Soil and Groundwater

Articles 16 and 22 of the Industrial Emissions Directive (IED) require that a quantified baseline is established for the level of contamination of soil and groundwater with hazardous substances, in order that a comparison can be made on final cessation of activities.

We have used the non-ferrous metals permit review to regulate against the above IED requirements. Our Regulation 60 notice required operators, where the activity of the installation involved the use, production or release of a relevant hazardous substance (as defined in Article 3(18) of the Industrial Emissions Directive), to carry out a risk assessment considering the possibility of soil and groundwater contamination at the installation with such substances. Where any risk of such contamination was established we requested that the operator either:

- prepare and submit a baseline report containing information necessary to determine the current state of soil and groundwater contamination; or

- provide a summary report referring to information previously submitted where they were satisfied that such information represented the current state of soil and groundwater contamination

so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation the activity.

Where operators concluded that there were no risks of soil or groundwater contamination (due to there not being any release of hazardous substances), they were required to provide a copy of the risk assessment.

Our intention was to use the non-ferrous metals permit review to regulate any discharge of hazardous substances to soil and groundwater. However the operator has not provided a satisfactory response to question 7 on our Regulation 60 notice to enable us to undertake this aspect of the review within the agreed project timeline. We have therefore carried over this requirement into the consolidated variation notice.

We have included improvement condition IC12 requiring the operator to submit a risk assessment considering the possibility of soil and groundwater contamination where the activity involves the use, production or release of a relevant hazardous substance.

A follow-up improvement condition (IC13) has also been included which requires the operator, if having established that there is a risk to soil and groundwater, to submit a baseline report compliant with Article 22 of the IED, containing information necessary to determine the current state of soil and groundwater contamination. This shall enable a quantified comparison to be

made with the state of soil and groundwater contamination upon definitive cessation of activity.

The operator will be required to submit their IC12 response within 3 months of the effective date of our notice, and their IC13 response (if deemed necessary) within 12 months of the effective date.

3 The legal framework

The consolidated variation notice will be issued under Regulations 18 and 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 other relevant legislation which also have to be addressed.

We consider that, in issuing the consolidated variation notice, it will ensure that the operation of the installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

We have set emission limit values (ELVs) in line with the BAT Conclusions, unless a tighter, i.e. more stringent, limit was previously imposed and these limits have been carried forward. For emissions to each relevant environmental receptor (i.e. air, or surface water), the emission limits and monitoring requirements have been incorporated into the Consolidated Variation Notice via two tables in Schedule 3 – Emissions and monitoring, as follows:

Emissions to air

- Table S3.1a, the requirements of which are effective from the date of issue of the notice, and which contains the existing ELVs and monitoring requirements; and

- Table S3.1b, the requirements of which will take effect from 30 June 2020, and which contains amended ELVs where a BAT-AEL is specified in the BAT Conclusions, and any associated updated monitoring requirements.

Annex 1

Review of operating techniques within the installation against BAT Conclusions

BAT Conclusions for the non-ferrous metals industries, were published by the European Commission on 30 June 2016. There are 184 BAT Conclusions. This annex provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation.

This annex should be read in conjunction with the consolidated variation notice.

The overall status of compliance with the BAT conclusion is indicated in the table as:

NA Not applicable
CC Currently compliant
FC Compliant in the future (within 4 years of publication of BAT Conclusions)
NC Not compliant

Table 1: Decision checklist for relevant BAT Conclusions		
Summary of BAT Conclusion requirement for Non-Ferrous Metals Industries	**Status** **NA / CC / FC / NC**	**Assessment of the installation capability to demonstrate compliance with the BAT Conclusion requirement** **Type of process: LEAD AND / OR TIM PRODUCTION**
BAT Conclusions that are not applicable to this installation	**NA**	**General BAT Conclusions for Non-Ferrous Metals Industries: 9-17.** BAT Conclusions for copper production: 20-54 inclusive. BAT Conclusions for alumina production: 55-57 inclusive. BAT Conclusions for anode production: 58-63 inclusive. BAT Conclusions for primary aluminium production: 64-73 inclusive. BAT Conclusions for secondary aluminium production: 74-86 inclusive. BAT Conclusions for salt slag recycling process: 87-89 inclusive. **BAT Conclusions for lead and/or tin production: 90-107 inclusive.** BAT Conclusions for primary zinc production: 108-120 inclusive. BAT Conclusions for secondary zinc production, 121-130 inclusive. BAT Conclusions for cadmium production: 131-133 inclusive. BAT Conclusions for precious metals production: 134-149 inclusive. BAT Conclusions for ferro-alloys production: 150-162 inclusive. BAT Conclusions for nickel and/or cobalt production: 163-176 inclusive. BAT Conclusions for carbon and/or graphite production: 177-184 inclusive.
BAT Conclusions where we accept the operator's Reg 60 notice response that they are	**CC**	**General BAT Conclusions for Non-Ferrous Metals Industries: 2, 5, 7, 8, 18, 19.**

Table 1: Decision checklist for relevant BAT Conclusions		
Summary of BAT Conclusion requirement for Non-Ferrous Metals Industries	**Status** **NA / CC / FC / NC**	**Assessment of the installation capability to demonstrate compliance with the BAT Conclusion requirement** **Type of process: LEAD AND / OR TIM PRODUCTION**
currently compliant and no further explanation is required.		**BAT Conclusions for lead and/or tin production: None.**
BAT Conclusions where improvements will be undertaken on site within the 4 year period in order to achieve compliance with the narrative and/or BATAEL prior to the 4 year deadline	**FC**	**General BAT Conclusions for Non-Ferrous Metals Industries: 1, 3, 4, 6.** **BAT Conclusions for lead and/or tin production: None.**
BAT Conclusions where the operator has responded that they are not compliant and have not submitted any plans to become compliant	**NC**	**General BAT Conclusions for Non-Ferrous Metals Industries: None.** **BAT Conclusions for lead and/or tin production: None.**

Key Issues

Where relevant and appropriate, we have incorporated the techniques described by the operator in their Regulation 60 / 61 notice responses as specific operating techniques required by the permit, through their inclusion in Table S1.2 of the consolidated variation notice.

Assessment against BAT Conclusions 90-107

Assessment of applicability and compliance with each BAT conclusion has been made on an case by case basis. For this installation BAT conclusions 90-107 were found to be not applicable.

For the most part this is due to the basic nature of the non-ferrous process undertaken on site: refined lead ingots are purchased to a specification, remelted and cast into semi-finished products. The operator has confirmed that neither primary nor secondary lead is produced on site. Secondary sources of lead, including batteries, are not processed on site. There are no pre-treatment, raw material preparation, refining, smelting or alloying processes undertaken at the installation in connection with the non-ferrous activity.

The primary method of emission control from the lead melting pot is via temperature control of the melt. The lead melting systems use temperature feedback of the molten liquid lead in order to ensure that the temperature is below fume point.

Nevertheless the operator has, regardless of the applicability of the BAT Conclusions, identified where relevant BAT techniques are in use at the installation; these techniques are given in Annex 5 of this document.

Lead emissions from emission point A1

The operator has confirmed that emissions from emission point A1 consist solely of flue gas emissions from the combustion of fuel oil to heat the lead melting pot. There is no extraction from the melting pot and there are no emissions from the melting pot released at point A1.

BAT Conclusions 96 and 97 are not applicable to this installation. There is therefore no requirement to monitor lead at emission point A1 from 30 June 2020 and this requirement has been removed in Table S3.1b of the consolidated variation notice.

However a review of recent monitoring at emission point A1 shows lead emissions in air at concentrations approaching the existing emission limit value (0.5 mg/m^3). We have therefore included an improvement condition that requires the operator to investigate and determine the cause of elevated levels of lead in air at emission point A1 and to provide an action plan to

address the issues such that emissions of lead in air at emission point A1 are eliminated or minimised to the point of being considered negligible. The operator is required to undertake monitoring to demonstrate that the remedial action taken has been successful.

The description of the source of emissions at emission point A1 is revised to 'Oil burners serving the lead melting pot' in Tables 3.1a and 3.1b of the consolidated variation notice.

Annex 2a

Assessment, determination and decision where an application(s) for Derogation from BAT Conclusions with associated emission levels (AEL) has been requested.

The IED enables a competent authority to allow derogations from BAT-AELs stated in BAT Conclusions under specific circumstances as detailed under Article 15(4):

‘By way of derogation from paragraph 3, and without prejudice to Article 18, the competent authority may, in specific cases, set less strict emission limit values. Such a derogation may apply only where an assessment shows that the achievement of emission levels associated with the best available techniques as described in BAT Conclusions would lead to disproportionately higher costs compared to the environmental benefits due to:

(a) the geographical location or the local environmental conditions of the installation concerned; or

(b) the technical characteristics of the installation concerned.

The competent authority shall document in an annex to the permit conditions the reasons for the application of the first subparagraph including the result of the assessment and the justification for the conditions imposed. ‘

A summary of any derogations granted is also recorded an Annex of the consolidated variation notice in accordance with the requirement of IED Article 15(4) as described above.

The operator did not request derogation from compliance with any BAT-AEL included within the BAT Conclusions as part of their Regulation 60 notice response.

Annex 2b

Advertising and Consultation on the draft decision

This section is not applicable as no derogations from BAT-AELs have been considered, nor is the installation a site of high public interest.

Annex 3

Improvement Conditions

Based on the information in the operator's Regulation 60/61 notice response and our own records of the capability and performance of the installation at this site, we consider that we need to set improvement conditions so that the outcome of the techniques detailed in the BAT Conclusions are achieved by the installation. These improvement conditions are set out below - justifications for them is provided at the relevant section of the decision document.

We also consider that we need to set improvement conditions relating to changes in the permit not arising from the review of compliance with BAT conclusions. The justifications for these are provided in sections 2.5 and Annex 4 of this decision document.

There are some improvement conditions on the existing permit which are not yet complete. They are shown in the table below. These improvement conditions have been carried forward in the consolidated permit.

If the consolidated permit contains existing improvement conditions that are not yet complete or the opportunity has been taken to delete completed improvement conditions then the numbering in the table below will not be consecutive as these are only the improvement conditions arising from this permit variation.

Reference	Improvement Condition	Completion date
IC04 Note 1	A procedure shall be written and implemented for recording and investigating incidents.	01/01/2005
IC05 Note 1	A site accident management plan shall be written and implemented.	01/04/2005
IC11	The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 30 June 2020. The report shall include, but not be limited to, the following: 1. Methodology for achieving BAT. 2. Associated targets / timelines for reaching compliance by 30 June 2020 3. Any alterations to the initial plan.	Unless otherwise agreed by the Environment Agency progress reports to be submitted every 6 months from the date of issue of notice V003. Compliance by 30 June 2020.

Reference	Improvement Condition	Completion date
	The report shall address the following BAT Conclusions: 1, 3, 4, 6. **BAT 1** (implement and adhere to an Environmental Management System (EMS) that incorporates all the listed features). **BAT 3** (implementation of a process control system to ensure stable process operation). **BAT 4** (application of a maintenance management system which addresses the performance of dust abatement systems as part of the EMS). **BAT 6** (set up and implement a diffuse dust emissions action plan as part of the EMS). Refer to BAT Conclusions for a full description of the BAT requirements.	
IC12	The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a relevant hazardous substance (as defined in Article 3(18) of the Industrial Emissions Directive). The risk assessment shall clearly establish with appropriate evidence whether or not there is a risk of contamination of soil and groundwater.	Within 3 months of effective date of notice V003.
IC13	Where the risk assessment carried out under IC 12 above establishes a risk to soil and groundwater the operator shall: a) prepare and submit a baseline report compliant with Article 22 of the Industrial Emissions Directive (IED) containing information necessary to determine the current state of soil and groundwater contamination; or b) provide a summary report referring to information previously submitted where the operator is	Within 12 months of effective date of notice V003.

Reference	Improvement Condition	Completion date
	satisfied that such information represents the current state of soil and groundwater contamination, so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation of activity.	
IC14	The operator shall submit to the Environment Agency for approval a written report on emissions of lead in air from the lead melting pot. The report shall include (but not be limited to) the following: a) results of an investigation by the operator to determine the cause of recent elevated levels of lead in air at emission point A1; b) details of an Action Plan (including timescales) to address the issues identified in (a) such that emissions of lead in air at emission point A1 are eliminated, or minimised to the point of being considered negligible. The Action Plan shall include proposals for undertaking additional monitoring to demonstrate that the remedial action taken has been successful, and as a minimum shall comprise monitoring during six consecutive lead melting operations (or as otherwise agreed by the Environment Agency).	Within 3 months of date of issue of variation notice V003
IC15	The operator shall implement the Action Plan specified in IC14 above upon receipt of written approval by the Environment Agency. The operator shall submit to the Environment Agency for approval a report containing the following: a) the monitoring results obtained under IC14; b) analysis of the results;	Within 9 months of approval of IC14 from the Environment Agency

Reference	Improvement Condition	Completion date
	c) conclusions from the study; and d) details of any further remedial actions necessary.	

Note 1: this improvement condition has been retained from variation notice EPR/BT0111IP/V002

Annex 4

Review and assessment of changes that are not part of the BAT Conclusions derived permit review.

Changes to monitoring

When the permit was first determined in 2004, the description of the cupola, taken from Table 1: compliance timetable, Local Authority Process Guidance Note 2/5 (04), Secretary of State's Guidance for Hot and Cold Blast Cupolas, and Rotary Furnaces, was incorrect.

The description used was for a cupola with wet arrestment ducted to a stack and required an ELV of 20mg/m^3 for total particulates from 01 April 2010, as included as Note 3 in table 2.2.2 of the permit.

The correct description should have been a cupola with wet arrestment not ducted to a stack and did not require the ELV from 01 April 2010.

The operator was to submit a variation to request the removal of this permit footnote but has not done this to date.

The appropriate emissions monitoring requirements are shown in Table 4.1 of Local Authority Process Guidance Note 2/05 (13) Statutory Guidance for Cold Blast Cupolas and have now been incorporated into Table S3.1 of the consolidated variation notice.

The monitoring standards in Table S3.1 have been updated in accordance with our M2 monitoring guidance.

Spray Painting Booth / Emission Point A3

Cast products may be spray painted on site. This activity is not currently recorded in the existing permit. An additional directly associated activity (spray painting booth), and associated emission point (A3), has therefore been included in the consolidated variation notice.

The spray painting booth is fitted with a paper filter system, with continuous monitoring of air pressure and flow, to locally control any associated diffuse emissions. If the differential pressure is too high the extraction fan is inhibited indicating that the filter needs replacing.

The coating of metallic surfaces, including surfaces of ships etc., is an activity listed in Annex I of the Solvent Emissions Directive. The directive specifies that emission controls are required where solvent consumption is greater than 5 tonnes per year. The operator has confirmed that less than 5 tonnes per year of solvent is used at the installation. We have therefore not set emission limit values or monitoring requirements for VOC emissions at emission point A3.

Emission point W2

Existing arrangements on site for surface water management is either discharge via interceptors to a tributary of the River Camel which runs adjacent to the south-eastern boundary of the site, or to land via soakaway. The existing permit identifies the discharge to controlled water as emission point W1 but there is no emission point identified for the soakaway. This emission point is now identified as W2 in the consolidated variation notice.

Annex 5

Priority compliance Issues & detailed assessment of Regulation 60 notice responses where future action likely

BATc Number	Compliance Issue Priority BAT indicated in **Bold Text**	Relevant permit condition	Compliance stated by operator NA / CC / FC / NC	Compliance assessment conclusion NA / CC / FC / NC	Summary of Permitting Officer assessment against BATc techniques	Compliance Action to implement BATc
	BAT 1-19: General requirements					
1	In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the features given.	1.1	FC	FC	In their response the operator confirms that the current EMS is limited and needs to be improved in order to be compliant with BAT 1. We have therefore included improvement condition IC11 to ensure that the requirements of BAT 1 are met in full by 30 June 2020. The condition requires that an action plan and timescales for compliance are submitted to the Environment Agency and that regular progress reports are provided.	Confirm future compliance with IC by inspection.
2	In order to use energy efficiently, BAT is to use a combination of the techniques given.	1.2	CC	CC	In their response the operator confirms compliance with the requirements of BAT 2. The following techniques are in use at the site:	None.

BATc Number	Compliance Issue Priority BAT indicated in **Bold Text**	Relevant permit condition	Compliance stated by operator NA / CC / FC / NC	Compliance assessment conclusion NA / CC / FC / NC	Summary of Permitting Officer assessment against BATc techniques	Compliance Action to implement BATc
					BAT 2l: suitable insulation for high temperature equipment such as steam and hot water pipes. The lead melting pot has an insulated combustion chamber where the fuel oil burners are located. BAT 2n: use high efficiency electric motors equipped with variable-frequency drive (VFD), for equipment such as fans. Motors that fail are upgraded to high efficiency (IE3 or higher), evaluated, and where appropriate to the process VFDs are fitted. The use of VFDs is considered on a case by case basis where process efficiencies will be achieved, e.g. VFDs are currently fitted to crane motors. BAT 2o: use control systems that automatically activate the air extraction system or adjust the extraction rate depending on actual emissions. The Environment Agency is satisfied that the operator meets the requirements of this BAT Conclusion.	

BATc Number	Compliance Issue Priority BAT indicated in **Bold Text**	Relevant permit condition	Compliance stated by operator NA / CC / FC / NC	Compliance assessment conclusion NA / CC / FC / NC	Summary of Permitting Officer assessment against BATc techniques	Compliance Action to implement BATc
3	In order to improve overall environmental performance, BAT is to ensure stable process operation by using a process control system together with a combination of the techniques given.	1.1	FC	FC	In their response the operator initially confirmed compliance with the requirements of BAT 3. The operator confirms that the process is remelting of commercially purchased lead to a specification using an oil fired furnace with temperature feedback in order to ensure that the temperature is below fume point. These techniques are in line with: BAT 3a: inspect and select input materials according to the process and the abatement techniques applied. BAT 3j: temperature monitoring and control at melting and smelting furnaces to prevent the generation of metal and metal oxide fumes through overheating. However the operator subsequently confirmed that a process control system is not currently in place at the site. We have therefore set an improvement condition IC11 in the consolidated variation notice that requires the operator to be fully compliant with this aspect of BAT 3 by 30/06/2020. The condition requires that an action plan and timescales for compliance	Confirm future compliance with IC by inspection.

BATc Number	Compliance Issue Priority BAT indicated in **Bold Text**	Relevant permit condition	Compliance stated by operator NA / CC / FC / NC	Compliance assessment conclusion NA / CC / FC / NC	Summary of Permitting Officer assessment against BATc techniques	Compliance Action to implement BATc
					are submitted to the Environment Agency and that regular progress reports are provided.	
4	In order to reduce channelled dust and metal emissions to air, BAT is to apply a maintenance management system which especially addresses the performance of dust abatement systems as part of the environmental management system (see BAT 1).	3.1	FC	FC	In their response the operator confirms that the dust abatement system for the fettling bay is included in the site maintenance management system and will be included within the site EMS (see BAT 1). We have therefore included an improvement condition IC 11 in the consolidated variation notice that requires the inclusion of a maintenance management system that especially addresses the performance of dust abatement systems in the EMS in line with BAT 4. The condition requires that an action plan and timescales for compliance by 30 June 2020 are submitted to the Environment Agency and that regular progress reports are provided.	Confirm future compliance with IC by inspection.
5	In order to prevent or, where this is not practicable, to reduce diffuse emissions to air and water, BAT is to collect diffuse emissions as much as	3.2	CC	CC	In their response the operator confirms compliance with the requirements of BAT 5.	None.

BATc Number	Compliance Issue Priority BAT indicated in **Bold Text**	Relevant permit condition	Compliance stated by operator NA / CC / FC / NC	Compliance assessment conclusion NA / CC / FC / NC	Summary of Permitting Officer assessment against BATc techniques	Compliance Action to implement BATc
	possible nearest to the source and treat them.				Dust emissions from the fettling bays are drawn locally into an extraction system which has HEPA bag filters installed. The fines are then collected in plastic bags, sealed and sent to landfill for disposal. The tools in the fettling bay are fitted with an interlock, and can only be operated when the extraction systems are running. The spray painting booth has a paper filter system (with continuous monitoring of air pressure / flow) to reduce emissions before release to air. There is no water used in the process therefore there are no process water emissions. Uncontaminated surface water from the site is discharged either via a series of grit traps and an interceptor or via soakaway to ground. The Environment Agency is satisfied that the operator meets the requirements of this BAT Conclusion.	

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6	In order to prevent or, where this is not practicable, to reduce diffuse dust emissions to air, BAT is to set up and implement an action plan on diffuse dust emissions, as part of the environmental management system (see BAT 1), that incorporates both of the following measures: (a) identify the most relevant diffuse dust emission sources (using e.g. EN 15445); (b) define and implement appropriate actions and techniques to prevent or reduce diffuse emissions over a given time frame.	3.2	FC	FC	In their response the operator confirms that an action plan on diffuse dust emissions will form part of the site EMS once implemented (see BAT 1). We have therefore included an improvement condition IC 11 in the consolidated variation notice that requires the implementation of an action plan on diffuse dust emissions as part of the EMS in line with BAT 6. The condition requires that an action plan and timescales for compliance by 30 June 2020 are submitted to the Environment Agency and that regular progress reports are provided.	Confirm future compliance with IC by inspection.
7	In order to prevent diffuse emissions from the storage of raw materials, BAT is to use a combination of the techniques given.	3.2	CC	CC	In their response the operator confirms compliance with the requirements of BAT 7. The following techniques are in use at the site: BAT 7a: enclosed buildings or silos/bins for storing dust-forming materials such as concentrates, fluxes and fine materials. BAT 7b: covered storage of non-dust-forming materials such as concentrates,	None.

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					fluxes, solid fuels, bulk materials and coke and secondary materials that contain water-soluble organic compounds. BAT 7c: sealed packaging of dust-forming materials or secondary materials that contain water-soluble organic compounds. BAT 7d: covered bays for storing material which has been pelletised or agglomerated. BAT 7f: dust/gas extraction devices placed at transfer and tipping points for dust-forming materials. BAT 7h: tank construction materials that are resistant to the contained materials. BAT 7k: design storage areas so that any leaks from tanks and delivery systems are intercepted and contained in bunds that have a capacity capable of containing at least the volume of the largest storage tank within the bund; delivery points are within the bund to collect any spilled material. BAT 7n: regular cleaning of the storage area and, when needed, moistening with water. BAT 7p: protective planting, windbreak fences or upwind mounts to lower the wind velocity in the case of outdoor storage.	

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					BAT 7q: one heap instead of several where feasible in the case of outdoor storage. BAT 7r: use oil and solid interceptors for the drainage of open outdoor storage areas. Use of concreted areas that have kerbs or other containment devices for the storage of material that can release oil, such as swarf. The Environment Agency is satisfied that the operator meets the requirements of this BAT Conclusion.	
8	In order to prevent diffuse emissions from the handling and transport of raw materials, BAT is to use a combination of the techniques given.	3.2	CC	CC	In their response the operator confirms compliance with the requirements of BAT 8. The following techniques are in use at the site: BAT 8a: enclosed conveyors or pneumatic systems to transfer and handle dust-forming concentrates and fluxes and fine-grained material. BAT 8b: covered conveyors to handle non-dust-forming solid materials. BAT 8c: extraction of dust from delivery points, silo vents, pneumatic transfer systems and conveyor transfer points, and	None.

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					connection to a filtration system (for dust-forming materials). BAT 8d: closed bags or drums to handle materials with dispersible or water-soluble components. BAT 8g: minimise transport distances. BAT 8k: place transfer conveyors and pipelines in safe, open areas above ground so that leaks can be detected quickly and damage from vehicles and other equipment can be prevented. If buried pipelines are used for non-hazardous materials, document and mark their course and adopt safe excavation systems. BAT 8l:automatic resealing of delivery connections for handling liquid and liquefied gas. BAT 8m:back-vent displaced gases to the delivery vehicle to reduce emissions of VOC. BAT 8n: wash wheels and chassis of vehicles used to deliver or handle dusty materials. BAT 8o: use planned campaigns for road sweeping.	

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					BAT 8p: segregate incompatible materials (e.g. oxidising agents and organic materials). BAT 8q: minimise material transfers between processes. The Environment Agency is satisfied that the operator meets the requirements of this BAT Conclusion.	
9	In order to prevent or, where this is not practicable, to reduce diffuse emissions from metal production, BAT is to optimise the efficiency of off-gas collection and treatment by using a combination of the techniques given.	NA	NA	NA	In their response the operator confirmed that neither primary nor secondary lead is produced on site. Refined lead is purchased to a specification and remelted. No alloying takes place on site. The Environment Agency is satisfied that this BAT conclusion is therefore not applicable.	None.
10	BAT is to monitor the stack emissions to air with at least the given frequency and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	3.1 3.5	CC	NA	In their response the operator confirmed compliance with the requirements of BAT 10. However the BAT 10 applies to stack emissions. There are no stack emissions from the lead melting pot. The only emissions at emission point A1 are flue gas emissions associated with the combustion of oil to heat the melting pot.	None.

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					The primary method of emission control from the lead melting pot is via temperature control of the melt. The lead melting systems use temperature feedback of the molten liquid lead in order to ensure that the temperature is below fume point. Emission point A1 (oil burners serving the lead melting pot) is currently monitored annually for lead, oxides of nitrogen and sulphur dioxide. BATs 96 and 97 are not applicable to this installation therefore the requirement to monitor lead is removed from 30 June 2020. See the Key Issues section above for more detail. The Environment Agency is satisfied that this BAT Conclusion is not applicable to this installation.	
11	In order to reduce mercury emissions to air (other than those that are routed to the sulphuric acid plant) from a pyrometallurgical process, BAT is to use one or both of the techniques given. BAT-AEL for Hg.	NA	CC	NA	In their response the operator stated compliance with BAT 11 but also stated that raw materials used on site do not contain mercury. The Environment Agency has determined that this BAT Conclusion and BAT-AEL are not applicable to this installation. This is	None.

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					because they relate to pyrometallurgical processes, which are typically only undertaken during primary metal production, and therefore are not applicable to the remelting of refined lead at this site.	
12	In order to reduce emissions of SO_2 from off-gases with a high SO_2 content and to avoid the generation of waste from the flue-gas cleaning system, BAT is to recover sulphur by producing sulphuric acid or liquid SO_2.	NA	NA	NA	This BAT conclusion is applicable to plants producing lead. The operator has confirmed that neither primary nor secondary lead is produced on site. Refined lead is purchased to a specification and remelted. No alloying takes place on site. The Environment Agency is satisfied that this BAT conclusion is therefore not applicable.	None.
13	In order to prevent NOx emissions to air from a pyrometallurgical process, BAT is to use one of the techniques given.	NA	NA	NA	The Environment Agency has determined that this BAT Conclusion is not applicable to this installation. This is because it relates to pyrometallurgical processes, which are typically only undertaken during primary metal production, and therefore are not applicable to the remelting of refined lead at this site.	None.
14	In order to prevent or reduce the generation of waste water, BAT is to	NA	NA	NA	In their response the operator states that this BAT Conclusion is not applicable	None.

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	use one or a combination of the techniques given.				because water is not used in the process. There is no emission of process waste water. The Environment Agency is satisfied that this BAT Conclusion is not applicable.	
15	In order to prevent the contamination of water and to reduce emissions to water, BAT is to segregate uncontaminated waste water streams from waste water streams requiring treatment.	NA	NA	NA	In their response the operator states that BAT 15 is not applicable because water is not used in the process. There is no emission of process waste water. The only emission to surface water/ground is uncontaminated surface water. The Environment Agency has determined that this BAT Conclusion is not applicable for this installation as there is no on-site treatment of waste water.	None.
16	BAT is to use ISO 5667 for water sampling and to monitor the emissions to water at the point where the emission leaves the installation at least once per month and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international	NA	NA	NA	In their response the operator states that BAT 16 is not applicable because there are no emissions to water at the site. There is no discharge to sewer and the only emission to surface water/ground is uncontaminated surface water.	None.

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	standards that ensure the provision of data of an equivalent scientific quality. The monitoring frequency may be adapted if the data series clearly demonstrate sufficient stability of the emissions.				The Environment Agency is satisfied that this BAT conclusion is not applicable.	
17	In order to reduce emissions to water, BAT is to treat the leakages from the storage of liquids and the waste water from non-ferrous metals production, including from the washing stage in the Waelz kiln process, and to remove metals and sulphates by using a combination of the techniques given.	NA	NA	NA	In their response the operator states that BAT 16 is not applicable because there are no emissions to water at the site. There is no discharge to sewer and the only emission to surface water is uncontaminated surface water. The Environment Agency is satisfied that this BAT conclusion is not applicable.	None.
18	In order to reduce noise emissions, BAT is to use one or a combination of the techniques given.	3.4	CC	CC	In their response the operator confirms compliance with the requirements of BAT 18. The following techniques are in use at the site: BAT 18b: enclose noise plants or components in sound-absorbing structures.	None.

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					BAT 18c: use anti-vibration supports and interconnections for equipment. BAT 18d: orientation of noise-emitting machinery. BAT 18e: change the frequency of the sound. The Environment Agency is satisfied that the operator meets the requirements of this BAT Conclusion.	
19	In order to reduce odour emissions, BAT is to use one or a combination of the techniques given.	3.3	CC	CC	In their response the operator confirms compliance with the requirements of BAT 19. The following techniques are in use at the site: BAT 19a: appropriate storage and /handling of odorous materials. BAT 19b: minimise the use of odorous materials. BAT 19c: careful design, operation and maintenance of any equipment that could generate odour emissions.	None.

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					The Environment Agency is satisfied that the operator meets the requirements of this BAT Conclusion.	
	BAT 90-107: Lead and/or tin production					
90	In order to prevent or reduce diffuse emissions from preparation (such as metering, mixing, blending, crushing, cutting, screening) of primary and secondary materials (excluding batteries), BAT is to use one or a combination of the techniques given.	NA	CC	NA	In their response the operator initially confirmed compliance with this BAT Conclusion. However the operator subsequently confirmed that for the lead melting activity there is no raw material preparation occurring on site. Refined lead ingots are purchased to a specification and remelted. The Environment Agency is satisfied that this BAT conclusion is therefore not applicable. However we note that in their response the operator confirms that the following techniques are in use at the sand reclamation unit: BAT 90a: enclosed conveyer or pneumatic transfer system for dusty material. BAT 90b: enclosed equipment. When dusty materials are used the emissions are collected and sent to an abatement system.	None.

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					BAT 90c: mixing of raw materials carried out in an enclosed building. As used sand is broken down from lumps into sand again, there is an enclosed pneumatic system (fluidised bed conveyor) to move the reclaimed sand to the hopper.	
91	In order to prevent or reduce diffuse emissions from material pretreatment (such as drying, dismantling, sintering, briquetting, pelletising and battery crushing, screening and classifying) in primary lead and secondary lead and/or tin production, BAT is to use one or both of the techniques given.	NA	CC	NA	The operator has confirmed that this BAT Conclusion is not applicable because neither primary nor secondary lead is produced on site. Refined lead is purchased to a specification and remelted. There are no alloying processes occurring on site. The Environment Agency is satisfied that this BAT conclusion is therefore not applicable. However in their response the operator confirms that the following techniques are in use at the wider site: BAT 91a: enclosed conveyer or pneumatic transfer system for dusty material. BAT 91b: enclosed equipment. When dusty materials are used the emissions are collected and sent to an abatement system.	None.

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92	In order to prevent or reduce diffuse emissions from charging, smelting and tapping operations in lead and/or tin production, and from pre-decoppering operations in primary lead production, BAT is to use an appropriate combination of the techniques given.	NA	NA	NA	This BAT conclusion is applicable to installations producing primary lead. In their response the operator has confirmed that primary lead is not produced on site. Refined lead is purchased to a specification and remelted. The Environment Agency is satisfied that this BAT conclusion is therefore not applicable. However in their response the operator confirms that the following techniques are in use at the site: BAT 92e: enclosed building. BAT 92h: maintain the temperature in the furnace at the lowest required level.	None.
93	In order to prevent or reduce diffuse emissions from remelting, refining and casting in primary and secondary lead and/or tin production, BAT is to use a combination of the techniques given.	NA	NA	NA	In their response the operator has confirmed that neither primary nor secondary lead is produced on site. Refined lead is purchased to a specification and remelted. There are no alloying processes undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion is therefore not applicable.	None.

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					However in their response the operator confirms that the following technique is in use at the site: BAT 93d: temperature control of the melt.	
94	In order to reduce dust and metal emissions to air from raw material preparation (such as reception, handling, storage, metering, mixing, blending, drying, crushing, cutting and screening) in primary and secondary lead/or and tin production, BAT is to use a bag filter. BAT-AEL for Dust.	NA	NA	NA	In their response the operator has confirmed that neither primary nor secondary lead is produced on site. There is no raw material preparation, refined lead is purchased to a specification and remelted. There are no alloying processes undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion and BAT-AEL is therefore not applicable.	None.
95	In order to reduce dust and metal emissions to air from battery preparation (crushing, screening and classifying), BAT is to use a bag filter or a wet scrubber. BAT-AEL for Dust.	NA	NA	NA	In their response the operator states that this BAT Conclusion is not applicable because lead recovery from batteries is not undertaken at the site. The Environment Agency is satisfied that this BAT Conclusion and BAT-AEL is not applicable.	None.
96	In order to reduce dust and metal emissions to air (other than those that	NA	NA	NA	In their response the operator has confirmed that neither primary nor	None.

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	are routed to the sulphuric acid or liquid SO_2 plant) from charging, smelting and tapping in primary and secondary lead and/or tin production, BAT is to use a bag filter. BAT-AELs for Dust and Pb.				secondary lead is produced on site. Refined lead is purchased to a specification and remelted. There are no alloying processes undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion and BAT-AELs are therefore not applicable. The requirement to monitor lead is removed from 30 June 2020. See the Key Issues section above for more detail.	
97	In order to reduce dust and metal emissions to air from remelting, refining and casting in primary and secondary lead and/or tin production, BAT is to use the techniques given. BAT-AELs for Dust and Pb.	NA	NA	NA	In their response the operator has confirmed that neither primary nor secondary lead is produced on site. Refined lead is purchased to a specification and remelted. There are no alloying processes undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion and BAT-AELs are therefore not applicable. The requirement to monitor lead is removed from 30 June 2020. See the Key Issues section above for more detail.	None.
98	In order to reduce emissions of organic compounds to air from the raw material drying and smelting process in secondary lead and/or tin production,	NA	NA	NA	In their response the operator has confirmed that secondary lead is not produced on site. Refined lead is purchased to a specification and remelted.	None.

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	BAT is to use one or a combination of the techniques given. BAT-AEL for TVOC.				There are no drying, smelting or alloying processes undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion and BAT-AEL is therefore not applicable.	
99	In order to reduce PCDD/F emissions to air from the smelting of secondary lead and/or tin raw materials, BAT is to use one or a combination of the techniques given. BAT-AEL for PCDD/F.	NA	NA	NA	In their response the operator has confirmed that secondary lead is not processed on site – only melting of refined lead, which is purchased to a specification, is undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion and BAT-AEL is therefore not applicable.	None.
100	In order to prevent or reduce SO_2 emissions to air (other than those that are routed to the sulphuric acid or liquid SO_2 plant) from charging, smelting and tapping in primary and secondary lead and/or tin production, BAT is to use one or a combination of the techniques given. BAT-AEL for SO_2.	NA	NA	NA	In their response the operator has confirmed that neither primary nor secondary lead is produced on site. Refined lead is purchased to a specification and remelted. There are no alloying processes undertaken at the installation. The Environment Agency is satisfied that this BAT conclusion and BAT-AEL is therefore not applicable.	None.
101	In order to prevent the contamination of soil and groundwater from battery	NA	NA	NA	In their response the operator states that this BAT Conclusion is not applicable	None.

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	storage, crushing, screening and classifying operations, BAT is to use an acid-resistant floor surface and a system for the collection of acid spillages.				because lead recovery from batteries is not undertaken at the site. The Environment Agency is satisfied that this BAT Conclusion is not applicable.	
102	In order to prevent the generation of waste water from the alkaline leaching process, BAT is to reuse the water from the sodium sulphate crystallisation of the alkali salt solution.	NA	NA	NA	In their response the operator confirms that this BAT conclusion is not applicable because alkaline leaching is not undertaken at the installation. The Environment Agency is satisfied that this BAT Conclusion is not applicable.	None.
103	In order to reduce emissions to water from battery preparation when the acid mist is sent to the waste water treatment plant, BAT is to operate an adequately designed waste water treatment plant to abate the pollutants contained in this stream.	NA	NA	NA	In their response the operator states that this BAT Conclusion is not applicable because lead recovery from batteries is not undertaken at the site. The Environment Agency is satisfied that this BAT Conclusion is not applicable.	None.
104	In order to reduce the quantities of waste sent for disposal from primary lead production, BAT is to organise operations on site so as to facilitate process residues reuse or, failing that,	NA	NA	NA	The operator has confirmed that primary lead is not produced on site. Refined lead is purchased to a specification and remelted. The Environment Agency is	None.

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	process residues recycling, including by using one or a combination of the techniques given.				satisfied that this BAT conclusion is therefore not applicable.	
105	In order to allow the recovery of the polypropylene and polyethylene content of the lead battery, BAT is to separate it from the batteries prior to smelting.	NA	NA	NA	In their response the operator states that this BAT Conclusion is not applicable because lead recovery from batteries is not undertaken at the site. The Environment Agency is satisfied that this BAT Conclusion is not applicable.	None.
106	In order to reuse or recover the sulphuric acid collected from the battery recovery process, BAT is to organise operations on site so as to facilitate its internal or external reuse or recycling, including one or a combination of the techniques given.	NA	NA	NA	In their response the operator states that this BAT Conclusion is not applicable because lead recovery from batteries is not undertaken at the site. The Environment Agency is satisfied that this BAT Conclusion is not applicable.	None.
107	In order to reduce the quantities of waste sent for disposal from secondary lead and/or tin production, BAT is to organise operations on site so as to facilitate process residues reuse or, failing that, process residues recycling,	NA	NA	NA	The operator has confirmed that this BAT Conclusion is not applicable because secondary lead is not produced on site. Refined lead is purchased to a specification and remelted. There are no alloying processes undertaken at the installation.	None.

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	including by using one or a combination of the techniques given.				The Environment Agency is satisfied that this BAT conclusion is therefore not applicable. However the Environment Agency notes that, following discussions with the operator, that lead contaminated sand from the sand reclamation plant and the coarser fraction of dust collected in the fettling bay HEPA filter, are sent off-site for lead recovery.	