

## Compliance Assessment Report CAR\_NRW0038312

**Permit being assessed:** EP3935UC.

For: Real Alloy UK Ltd, held by Real Alloy UK Limited

At: Waunarlwydd Works, Westfield Industrial Park, Waunarlwydd, Swansea, SA5 4SF.

**Type of assessment carried out:** Check Monitoring/Sampling, Reason: Other.

On 18/05/2021.

Parts of permit assessed: Please see details

**NRW Lead Officer:** Ieuan Davies.

**Report sent to:** Helen Williams, HSE Manager on 25/05/2021.

### 1. Summary of our findings (full details in section 4)

| Part of permitted activity assessed (criteria)                                                                 | Assessment result | Permit condition |
|----------------------------------------------------------------------------------------------------------------|-------------------|------------------|
| G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment               | Assessed (A)      |                  |
| G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales | Assessed (A)      |                  |
| E1 - Emissions - Air                                                                                           | Assessed (A)      |                  |
| E3 - Emissions - Surface water                                                                                 | Assessed (A)      |                  |

Result types are explained in more detail in the 'Important Information' section below.

| Total number of non-compliances recorded | Total non-compliance score |
|------------------------------------------|----------------------------|
| 0                                        | 0                          |

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

### 2. What action is required?

No action required.

### 3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

**At this time, we do not intend to take any further action.**

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

## 4. Details of our assessment

### Introduction

This is a part review of the Quarter 1 2021 monitoring submissions & review of follow up extractive monitoring undertaken at Real Alloy due to the non-compliance notified from Q4 2020 submission.

Previous discussion of the Q4 non-compliance can be found in CAR Form NRW0037391.

On receipt of the December results the Operator have initiated an internal investigation into the possible causes for the elevated results and a check of the site's process records which is detailed in section **PCDD Discussion** below.

### Comments/Observations

#### **Quarter 1 Air Emissions Monitoring – extractive monitoring**

- The Q1 (January to March 2021) submissions included the results for all quarterly parameters required over this period.
- The Q1 submission also included the results for the required six-monthly monitoring parameters. Results were submitted for NO<sub>2</sub> and HF.

The results are as follows:

The VOC result for February was 9.7mg/m<sup>3</sup> with an uncertainty of 0.5mg/m<sup>3</sup>. The emission limit for VOC is 30mg/m<sup>3</sup>.

The Particulate result for February was 0.49mg/m<sup>3</sup> with an uncertainty of 0.18mg/m<sup>3</sup>. The emission limit for Particulates is 5mg/m<sup>3</sup>.

The NO<sub>2</sub> result for February was 29.7mg/m<sup>3</sup> with an uncertainty of 2.4mg/m<sup>3</sup>. The emission limit for NO<sub>2</sub> is 60mg/m<sup>3</sup>.

The HCL result for February was 0.02mg/m<sup>3</sup> with an uncertainty of 0.002mg/m<sup>3</sup>. The emission limit for HCL is 10mg/m<sup>3</sup>.

The HF result for February was 0.5mg/m<sup>3</sup> with an uncertainty of 0.003mg/m<sup>3</sup>. The emission limit for HF is 1mg/m<sup>3</sup>.

The SO<sub>2</sub> result for February was 4.1mg/m<sup>3</sup> with an uncertainty of 0.3mg/m<sup>3</sup>. The emission limit for SO<sub>2</sub> is 50mg/m<sup>3</sup>.

- From the data submitted the results appear to be compliant with the limits specified in the permit.

#### **Water 1**

The Operator has submitted limited monitoring of pH only for Real Alloys Surface Water emission point (WA1) to cover Quarter 1. However, the results provided indicate compliance with the permit. The Operator has stated the limited monitoring is owing to the inability to achieve a representative sample in part due to dry weather experienced over the Q1 period.

The Operator was able to undertake a full suite of analysis on a sample taken on the 24<sup>th</sup> of February 2021. The Operator submitted a Schedule 5 form for the following aluminium emission limit result:

The Aluminium result for February was 1.6mg/l with an uncertainty of 15.38%. The emission limit for Aluminium is 1.5mg/l.

However, the monitoring method used has a 15.38% uncertainty and taking this into account does not result in a permit breach.

All other results from the February submission indicate compliance with the permit.

Real Alloys permit requires monthly reporting of its monthly WA1 emission point monitoring. To bring this requirement in line with other permit reporting parameters, the submission of the WA1 monitoring on a quarterly basis will now be classed as compliant. The monthly monitoring of emission point WA1 will continue to be required.

### **PCDD discussion**

Following on from the 2020 Q4 failure the Operator was required to arrange a retest to be undertaken as soon as practicable. This retest was undertaken on the 25<sup>th</sup> & 26<sup>th</sup> of February 2021 (sent to NRW on 25<sup>th</sup> March 2021) with results summarised below:

The PCDD result was 0.139mg/m<sup>3</sup> with an uncertainty of 0.028mg/m<sup>3</sup>. The emission limit for PCDD is 0.1mg/m<sup>3</sup>.

The extractive retest for PCDD continued to be elevated. Following this elevated result, NRW requested a number of investigative reports from the Operator on the 29<sup>th</sup> March 2021 with regard to the PCDD breach failures in December 2020 and February 2021.

Sol environment (on behalf of the Operator) submitted responses to some of NRW's queries on the 30<sup>th</sup> April 2021. The response included investigation of permit breaches, overview of site operations and conclusion of potential causes of ELV breaches which are summarised below:

- The Operator stated that plant production had reduced to a single furnace (50% reduction in production between March and September 2020). Recommencing use of both furnaces in October 2020.
- The Operator detailed maintenance on the baghouse revealed "cake-like" build up on filter elements. Filter elements were within 5-year operational design.
- The Operator has concluded the prolonged operation of a single furnace led to extended operation at lower temperatures, significantly impacting the performance of the bicarb reagents, such that they formed an agglomerated mass (in the form of a dust cake) on the outer surface of the filter elements. This in turn compromising the filter performance and preventing the effective releases and self-cleaning mechanism of the baghouse plant.
- The Operator have informed NRW as of 10th April 2021 all 1680 filter elements have been replaced and the baghouse plant returned to normal operating performance with a significant inventory of new replacement filter elements now available on-site as maintenance spares.

Following the improvements detailed within Sol Environments report, further extractive monitoring was undertaken on the 26<sup>th</sup> March and 22<sup>nd</sup> April 2021. The PCDD results are as follows:

The PCDD result on the 26<sup>th</sup> March 2021 was 0.0013mg/m<sup>3</sup> with an uncertainty of 0.00027mg/m<sup>3</sup>. The emission limit for PCDD is 0.1mg/m<sup>3</sup>.

The PCDD result on the 22<sup>nd</sup> April 2021 was 0.0078mg/m<sup>3</sup> with an uncertainty of 0.0016mg/m<sup>3</sup>. The emission limit for PCDD is 0.1mg/m<sup>3</sup>.

Both retest results appear to be compliant with the PCDD parameter within the Operator's environmental permit.

#### **Abatement Technology Trial/Variation**

The investigation concluded the prolonged utilisation of a single furnace led to operating at lower temperatures impacting the optimum operation of the baghouse. The investigation report states the Operator are seeking to trial the use of a lime and activated carbon additive as a different reagent to use during periods of single furnace operation. This change of abatement technology will likely require trials permission and a permit variation. Please discuss this matter with your regulating Inspector at the earliest opportunity.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

## Important information

### Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

### Assessment results and non-compliance categories (used in section 1):

| Assessment result | Description                                                       |
|-------------------|-------------------------------------------------------------------|
| Assessed (A)      | Assessed or assessed in part, no evidence of non-compliance found |
| Action only (X)   | Action only relating to the activity assessment                   |
| Ongoing (O)       | Ongoing non-compliance, not scored                                |

| Non-compliance category    | Description                                                                                                                 | Score |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------|
| C1 Major                   | Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property | 60    |
| C2 Significant             | Potential to have a significant impact or effect on the environment, people and/or property                                 | 31    |
| C3 Minor                   | Potential to have a minor or minimal impact or effect on the environment, people and/or property                            | 4     |
| C4 No environmental impact | Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property       | 0.1   |

### How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

**What are suspended scores?**

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

**Full list of Industry and Waste action criteria (used in section 1 and 2):****A: Permitted activities**

- A1 Specified by permit

**B: Infrastructure**

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

**C: General management**

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

**D: Incident management**

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

**E: Emissions**

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

**F: Amenity**

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

**G: Monitoring and records, maintenance and reporting**

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

**H: Resources efficiency**

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

## Enforcement response

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

## Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

## Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

## What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk) for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at [ask@ombudsman.wales](mailto:ask@ombudsman.wales)

## Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.