

This form will report compliance with your permit as determined by an NRW officer

Site	Royal Mint EPR/KP3135KV/V004	Permit Ref	KP3135KV		
Operator/ Permit holder	The Royal Mint Ltd				
Date	19/03/2015	Time in	09:30	Out	15:00
What parts of the permit were assessed	Meeting with Royal Mint and Welsh Water to discuss sulphate emissions to sewer				
Assessment	Site Inspection	EPR Activity:	Installation: X	Waste Op:	Water Discharge:
Recipient's name/position	Martyn Grant, Environmental Manager				
Officer's name	Rebecca Green, Neil Griffiths	Date issued	23/03/2015		

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS scores can be consolidated or suspended, where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit Conditions and Compliance Summary			Condition(s) breached
a) Permitted activities	1. Specified by permit	A	
b) Infrastructure	1. Engineering for prevention & control of pollution	N	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	N	
c) General management	1. Staff competency/ training	A	
	2. Management system & operating procedures	A	
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	A	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	A	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk), A = Assessed (no evidence of non-compliance), N = Not assessed, NA = Not Applicable, O = Ongoing non-compliance – not scored

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- the part(s) of the permit that were assessed (e.g. maintenance, training, combustion plant, etc)
- where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- any non-compliances identified
- any non-compliances with directly applicable legislation
- details of any multiple non-compliances
- information on the compliance score accrued inc. details of suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

Agenda

1. Review of discharges to sewer and identification of trends
 - a. sulphate concentration since October 2014;
 - b. volumes discharged since October 2014.
2. Review of water abstraction volumes and trends since October 2014.
3. Progress with project to reduce sulphate in effluent
 - a. evaluation of results to date;
 - b. operation of effluent treatment plant;
 - c. other measures investigated.
4. Further action
 - a. RM proposals;
 - b. substitution of sulphuric acid;
 - c. improved effluent treatment plant performance.
5. Timescale to return to compliance with consent limit.
6. AOB
 - a. recovery of carbonate recovery process filter cake;
 - b. high copper in sewage discharge action plan.
7. Site inspection to include effluent treatment plant and alibronze burnishing process area.

Attending:

Martyn Grant, Environmental Manager, The Royal Mint (RM);

Ian Young, CoMAH Compliance Manager, RM;

Rebecca Hughes, Laboratory Services Manager, RM;

Jenny Honey, Waste Pipeline Manager, RM;

Naomi Baker, SHE Coach, RM;

Heather Pepper, Trade Effluent Officer, Welsh Water (WW);

Neil Griffiths, Environment Officer, Natural Resources Wales (NRW);

Rebecca Green, PPC Compliance Officer, NRW.

Items 1, 2 and 3

A comprehensive review of the actions and findings to date was given by members of the RM team.

The discharge to sewer has been diluted 13 times with abstracted water since November 2014. The consent limit for sulphate emissions and daily volumes discharged to sewer have not been exceeded during this period. The amount of abstracted water used for these dilutions has not exceeded the estimates sent to NRW in September 2014.

A comprehensive programme to quantify and measure the inputs and outputs to the effluent treatment plant (ETP) has been running since November 2014. The improved control has already benefitted production volumes as there have been significantly fewer shutdowns due to backlogs of waste water waiting to be treated. Graphs shown during the meeting clearly illustrated the point.

A failure mode and effects analysis (FMEA) has been conducted on the ETP, which is being used in a criticality assessment. A dedicated maintenance operator has been assigned to the ETP. The aim of these measures is to improve control of the inputs, outputs and reliability of the ETP. It may also be possible to use this data to predict how certain work streams will affect operation of the ETP.

New analytical equipment is being purchased to improve control of the ETP process and another laboratory is being installed close to the ETP.

4. Further Action

RM will continue the data gathering phase of this project, putting improvements in place as it becomes practical to do so.

The consideration of substitution of sulphuric acid is not a priority at the moment, but may be considered at a later date.

The team involved with this project should be congratulated on making such significant improvements in such a short time. It is obvious that all members of the team work well together and are making the most of their different skills to deliver significant benefits for RM's business.

The pace of change and improvement may well slow as the project progresses. This is normal for an undertaking of this size and team members should not be discouraged.

5. Timescale to return to compliance

RM requested that their current authorisation from Welsh Water (WW) of 3rd November 2014, for the disposal of additional trade effluent, be extended until March 2016. Neither NRW nor WW view dilution as an acceptable treatment method and are not minded to extend this authorisation for such a long period.

However, given the significant progress that has been made to date, we are prepared to agree that the authorisation be extended to 30th September 2015, with a review of progress in mid-September 2015.

6a. Recovery of filter cake from carbonate removal process

Carbonate is removed from the copper plating solutions by chilling. The resultant sludge is washed and treated with hypochlorite to remove traces of cyanide, which results in the precipitation of copper oxide. This material is sent to a small filter press and the resulting cake then goes to Germany for recycling.

6b. High Copper in Sewer Action Plan

RM set an action plan in motion in July 2014 following a Schedule 5 notification of an emission of copper above the ELV on 15th June 2014. The source of the excess copper was found to be the burnishing process, when alibronze was being treated. This is due to the particular chemicals added to burnishers when processing alibronze. The action plan was generated by the "Competent Authority Action Tracker Process" developed as a result of previous comments made by NRW. Since this is now a formal process, it is appropriate that completion of an action plan should be formally recognised by NRW.

NRW agree that the action plan is complete and may therefore be closed.

7. Site Inspection

The ETP was very much cleaner than when it was last seen. Some areas were inaccessible due to maintenance operations. The flocculant dosing system is still not very clean, with what appears to be bio-contamination in the clear cylinder. It may be beneficial for RM to contact the flocculant and equipment suppliers to determine whether the process and equipment are operating at their most efficient.

Skips used to collect the filter cake were both in good condition, as was a third which was being installed during the inspection.

The burnishing area was inspected to verify that the action plan had been implemented. The use of alternative chemicals for burnishing alibronze was discussed.

The old ETP is in the process of being demolished.

Access to the cyanide treatment room was denied, so it was not possible to check on the progress of the improvements in this area. This room will be inspected during the next visit, so access should be provided. One of the nickel plating plants was also inspected and was satisfactory.

END.

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Operator/ Permit	The Royal Mint Ltd	Date	19/03/2015

Section 3- Enforcement Response **Only one of the boxes below should be ticked**

<p>You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.</p>	
<p>Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.</p>	<input type="checkbox"/>
<p>In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.</p>	<input type="checkbox"/>
<p>We will now consider what enforcement action is appropriate and notify you, referencing this form.</p>	<input type="checkbox"/>

Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

Criteria Ref.	CCS Category	Action Required/Advised	Due Date
See Section 1 above			

Section 5 - Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- advise on corrective actions verbally or in writing
- require you to take specific actions in writing
- issue a notice
- require you to review your procedures or management system
- change some of the conditions of your permit
- decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you.

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- ensure you comply with other legislative provisions which may apply.

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance which could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General Information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- offering/providing you with its literature/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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within twenty working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with the officer's line managers. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00–18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.