

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

The Royal Mint Limited

The Royal Mint
Llantrisant
Pontyclun
CF72 8YT

Variation application number
EPR/KP3135KV/V003

Permit number
EPR/KP3135KV

The Royal Mint

Permit number EPR/KP3135KV

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

The Royal Mint is responsible for the design, production and distribution of coinage for the United Kingdom in addition to over 100 countries worldwide.

This variation authorises the installation of a pilot scale plating line, to enable modification to current plated coin offerings. The technology used is based on the processes / operations of the site's current copper, zinc and nickel plating lines, with the addition of small amounts of rare earths. Two new air emission points have been added as part of this variation. These serve the trial plating line and associated cleaning baths. Releases to air from these emission points are low and do not add significantly to existing levels (which themselves have been previously determined as insignificant).

In addition, a number of minor changes have been made to the permit conditions, primarily regarding noise and odour. These are necessary to ensure the permit reflects our current permit template. The changes are detailed in Schedule 1 and Schedule 3 of this variation notice.

The schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application EPR/VP3539SL	Duly made 25/10/04	
Additional Information Requested	27/10/04	
Additional Information Received	08/11/04	
Additional Information Requested	30/11/04	
Additional Information Received	09/12/04 & 15/12/04	
Additional Information Requested	20/12/04	
Additional Information Received	22/12/04 & 07/01/05	
Permit Determined EPR/VP3539SL	10/01/05	
Transfer Application EPR/KP3135KV/T001	Duly made 27/10/09	Full transfer of permit EPR/VP3539SL
Transfer Issued EPR/KP3135KV/T001	18/12/09 Effective 01/01/10	
Variation Application EPR/KP3135KV/V002	Duly made 15/09/10	
Additional Information Requested	18/10/10	
Additional Information Received	25/10/10	
Variation Issued EPR/KP3135KV/V002	25/11/10	
Variation Application EPR/KP3135KV/V003	Duly made 31/08/11	Application to vary the permit to allow the operation of a pilot scale plating line.
Additional Information Requested	04/10/11	
Additional Information Received	12/10/11	Site plan showing location of emission points A30 and A31. COSHH assessment and MSDS for rare earth material.
Additional Information Received	17/10/11	Arrangements for off site disposal of waste & additional clarification on the LEV system.
Variation determined EPR/KP3135KV	16/11/11	Varied permit issued.

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number
EPR/KP3135KV

issued to:
The Royal Mint Limited (“the operator”)

whose registered office is
The Royal Mint
Llantrisant
Pontyclun
CF72 8YT

company registration number 06964873

to operate a regulated facility at
The Royal Mint
Llantrisant
Pontyclun
CF72 8YT

to the extent set out in the schedules.

The notice shall take effect from 16/11/2011

Name	Date
M Bischer	16/11/2011

Principal Permitting Team Leader, National Permitting Service

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

The following conditions are deleted following an Environment Agency initiated variation.

Condition 3.1.3 shall be deleted:

- 3.1.3 Total annual emissions from the emission point(s) set out in table(s) schedule 3 S3.1, S3.2 and S3.3 of a substance listed in schedule 3 table S3.4 shall not exceed the relevant limit in table S3.4.

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator

Table S1.2 shall be amended to:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Permit Application Reference VP3539SL	Section 2.5.3 of 'Installation report' Section 2.10.5 'Emission Point A14' of 'Installation report'	25/10/2004
Letter dated 07/01/2005 'Response to PPC Permit Application VP3539SL'	Item 4 (cyclone bypass)	07/01/2005
Permit Variation Application Supporting Information	Section 2.2 In Process Controls Section 2.3.1 Emissions to air Table 2.3.2 Emissions to water Section 2.10.3 Monitoring and Reporting of Emissions to Sewer Section 2.10.4 Monitoring and Reporting of Emissions to Surface Water Section 2.10.6 Monitoring and Reporting of Emissions to Air	15/09/2010
Permit Variation Application EPR/KP3135KV/V003 Supporting Information	Section 4.2 In Process Controls Section 4.3 Emissions Section 5 Efficient Use of Raw Materials Section 7 Energy Efficiency Section 10.4 Monitoring and Reporting of Emissions to Surface Water Section 10.5.1 LEV Emissions Section 10.8 Closure and Decommissioning	04/08/2011
Additional Information	Trial Plating Plant - Site Position (drawing number 90400/11/00/017-3, Issue A)	12/10/2011
Additional Information	Email entitled "The Royal Mint Ltd – summary of requested information".	17/10/2011

Table S1.3 shall be amended to:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP1	<p>The Operator shall submit a methodology, including timescales, to the Agency for the implementation of alternative technical measures to control air emissions from A1 to A13 including, but not limited, to the following:</p> <ul style="list-style-type: none"> ▪ Treatment tank temperature control ▪ Treatment tank chemical concentration ▪ Treatment tank levels and freeboard depth ▪ Treatment tank agitation methods <p>Improvements and procedures shall be agreed with the Agency in writing.</p>	01/09/2005
IP2	The Operator shall implement alternative technical measures as defined by the approved methodology proposed in response to IP1.	As agreed in response to IP1
IP3	The operator shall assess the feasibility of installing a composite sampler at emission point W1. A written report summarising the findings shall be submitted to the Agency.	01/10/2005
IP4	<p>The Operator shall implement operating procedures for discharges to controlled water from the COMAH area surface water containment tank. The procedures shall consider:</p> <ul style="list-style-type: none"> • Operating techniques during normal operation and emergency conditions • Calibration and maintenance of conductivity meter(s) • Training of relevant staff <p>A summary of the procedures shall be submitted to the Agency. Improvements identified shall be agreed in writing with the Agency including timescales and undertaken as agreed.</p>	01/08/2005
IP5	The Operator shall submit a report to the Agency by the date given in this programme, demonstrating whether the conductivity probes used for continuous measurement of conductivity on the effluent discharge to water meets with the performance standards given in the MCERTS document 'Continuous Water Monitoring Equipment Part 2, v1 February 2003'. The report shall include an assessment of the probes' performance with the criteria given in the standard and where these are not met, proposals and time-scales required to achieve the standard.	01/09/2005
IP6	<p>The Operator shall provide to the Agency a report detailing improvements to the installation effluent treatment techniques in terms of reducing emissions to sewer, in particular copper and cyanide, to levels detailed in Table 3.2 of 'Guidance for the Surface Treatment of Metals and Plastics &c.' S2.07. The report shall include a BAT justification for the techniques used and where necessary the report should also include the details for upgrading or replacement of these.</p> <p>This report shall include effluent treatment operational procedures, in particular:</p> <ul style="list-style-type: none"> ▪ In house monitoring regime to include methods and frequency of analysis of key pollutants including but not limited to copper and cyanide ▪ Chemical treatment ▪ Control of flow rate <p>The report shall provide a plan with timescales for the implementation of the improvements identified and shall be agreed by the Agency in writing.</p>	01/12/2005

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP7	The operator shall complete the improvements identified in the previous condition relating to emissions to sewer and associated installation effluent treatment techniques.	As agreed in previous improvement condition.
IP8	<p>The Operator shall submit to the Agency in writing, a programme of regular testing and inspection of all waste and chemical storage areas commencing with an initial audit to identify any necessary improvements to standards detailed in Section 2.2.5 of 'Guidance for the Surface Treatment of Metals and Plastics &c.' S2.07. The audit and programme shall include the following:</p> <ul style="list-style-type: none"> ▪ Inspection of primary, secondary and tertiary containment measures ▪ Inspection of coatings applied to secondary and tertiary containment ▪ Segregation of chemicals dependent upon reactivity ▪ Size of containment based on maximum stock levels <p>The proposed inspection regime shall be agreed with the Agency in writing and implemented throughout the installation. A summary of the audit findings shall also be submitted to the Agency for approval with improvements identified as appropriate.</p>	01/12/2005
IP9	The operator shall undertake improvements identified in initial audit as approved by the Agency in IP8	As agreed in writing by the Agency
IP10	The Operator shall undertake a feasibility study to investigate reuse of water from the installation effluent treatment plant. A summary of the report shall be submitted to the Agency. Improvements identified shall be agreed in writing with the Agency including timescales and undertaken as agreed.	01/04/2006
IP11	The Operator shall submit a report to the Agency, demonstrating whether the PCME DT 200 used for continuous measurement of particulate matter at release point A14 meets with the performance standards given in the MCERTs document 'MCERTs Performance Standard for Continuous Emission Monitoring Systems, version 2 revision 1, April 2003'. The report shall include an assessment of the instruments' performance with the criteria given in the standard and where these are not met, proposals and a time-scale to achieve the standard.	01/01/2006 (unless otherwise agreed in writing with Agency)
IP12	The Operator shall implement a programme of integrity testing of all underground storage chambers and sub-surface structures. Improvements identified shall be agreed in writing with the Agency including timescales and undertaken as agreed.	01/01/2006
IP13	The Operator shall obtain full ISO14001 certification for the operator's EMS as detailed in the application.	01/02/2006 (unless otherwise agreed in writing by the Agency)
IP14	The operator shall submit proposals for an impact assessment procedure for air emissions to include all emissions from the MRB and surface treatment activities. The assessment procedure shall follow the horizontal guidance IPPC H1, or an equivalent appropriate assessment. The proposals shall be agreed in writing with the Agency and assessment carried out as agreed.	01/06/2006

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP15	<p>The Operator shall identify and investigate minimisation, reuse or recycling of raw materials including, but not limited to, the following:</p> <ul style="list-style-type: none"> • Pickling acid • Copper and Nickel from plating process <p>A summary of the report shall be submitted to the Agency. Improvements identified shall be agreed in writing with the Agency including timescales and undertaken as agreed.</p>	01/06/2006
IP16	<p>The Operator shall undertake a feasibility study to reduce emissions to water at W1 of free cyanide and free chlorine. The study shall be submitted to the Agency to include a monitoring programme and propose improvements to operating techniques to enable levels of the above parameters to fall to within proven environmentally acceptable limits. Improvements identified shall be agreed in writing with the Agency including timescales and undertaken as agreed.</p>	01/09/2006
IP17	<p>The Operator shall provide a report in writing to the Agency detailing the monitoring method used to determine effluent flow at release point W1 and S1. The monitoring method shall be agreed in writing with the Agency.</p>	01/06/2005
IP18	<p>The Operator shall assess the current method for effluent flow as agreed in IP17 with the requirements given in the MCERTS standard 'Minimum requirements for the self-monitoring of effluent flow' version 2, Aug 2004. A written report shall be provided to the Agency detailing how this standard is to be achieved and shall include time scales for implementation.</p>	01/01/2006 (unless otherwise agreed in writing with Agency)
IP19	<p>Submit a written commissioning report to the Environment Agency for approval. The report shall include a review of all measures in place to minimise emissions to the environment. Where deficiencies are identified, the report must contain dates for the implementation of individual improvements. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the report.</p>	01/04/11
IP20	<p>Submit proposals to the Environment Agency for approval to undertake monitoring, followed by an environmental assessment, of air emissions from a representative number of emissions points associated with the annealing processes and new nickel plating lines (A15 – A27 inclusive). The assessment shall be submitted to the Environment Agency having regard to the Environment Agency's Guidance Note H1 Annex F: Air Emissions. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the report.</p>	01/05/11
IP21	<p>The Operator shall submit proposals to the Environment Agency for approval to undertake monitoring, followed by an environmental assessment of air emissions from emission points A30 and A31 associated with the trial plating line. The monitoring shall be undertaken post-commissioning when the trial plating line is fully operational. The written assessment shall be submitted to the Environment Agency having regard to the Environment Agency's Guidance Note H1 Annex F: Air Emissions. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the report.</p>	01/06/12

Table S3.1 shall be amended to:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 and A2 (Points A1 and A2 on Figure 2 in Annex A)	No parameters set	Zinc plating ZP1	No monitoring required			
A3 and A4 (Points A3 and A4 on Figure 2 in Annex A)	No parameters set	Copper plating CP2	No monitoring required			
A7 and A8 (Points A7 and A8 on Figure 2 in Annex A)	No parameters set	Copper plating CP3	No monitoring required			
A9 and A10 (Points A9 and A10 on Figure 2 in Annex A)	No parameters set	Nickel Plating Plant 2	No monitoring required			
A14 (Point A14 on Figure 2 in Annex A)	Copper and its compounds	Melting Rolling Blanking (MRB) Furnace	5mg/m ³	Spot sample	Annually	BS EN 14385:2004
A14 (Point A14 on Figure 2 in Annex A)	Nickel and its compounds as Ni	Melting Rolling Blanking (MRB) Furnace	1mg/m ³	Spot sample	Annually	BS EN 14385:2004
A14 (Point A14 on Figure 2 in Annex A)	Particulate matter	Melting Rolling Blanking Furnace	50mg/m ³	Spot sample	Annually	BS EN13284-1:2002
A15 and 16 (Point A15 and A16 on Figure 2 in Annex A)	No parameters set	Nickel plating lines 4 and 5	No monitoring required			
A17-27 (Points A17-27 on Figure 2 in Annex A)	No parameters set	Annealing ovens and A&P building vents	No monitoring required			
A28 (Point A28 on Figure 2 in Annex A)	No parameters set	Melting Rolling Blanking Mill Extraction	No monitoring required			

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A29 Die Heat Treatment Ovens	No parameters set	Heat treatment and tool room vents	No monitoring required			
A30 (Point A30 on Trial Plating Plant – Site Position Plan)	No parameters set	Trial zinc, copper & nickel plating baths	No monitoring required			
A31 (Point A31 on Trial Plating Plant – Site Position Plan)	No parameters set	Trial cleaning station baths	No monitoring required			

Schedule 3 – conditions to be added

The following conditions are added following an Environment Agency initiated variation.

Condition 2.3.2 shall be added:

- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

Condition 3.4.2 shall be added:

- 3.4.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

Conditions 3.5.1 and 3.5.2 shall be added:

3.5 Odour

- 3.5.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.5.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.