Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Peak Technology Metals Limited

Wilton Mineral Processing and Refining Facility
Wilton International
Middlesbrough
Tees Valley
TS6 8JH

Permit number

EPR/YP3938JL

Wilton Mineral Processing and Refining Facility
Permit number EPR/YP3938JL

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The c.6ha site is situated within the Wilton International site in Redcar, Middlesbrough and is centred approximately at grid reference NZ 56200 20900. The nearest residential property is approximately 500m to the west but the Kettle Beck and Kinkerdale Beck surface water features adjoin the site to the west and north respectively.

The installation processes rare earth ore concentrate using mainly kiln roasting, solvent extraction and precipitation to produce up to 34,500 tpa of a range of rare earth salts. The facility includes the main process areas, storage for raw materials and products, effluent treatment plant and other supporting infrastructure.

There are three main process waste streams. Solid leach and filter cakes are transferred off site for disposal. Residual waste water effluent is treated on site by neutralisation, metal precipitation and clarification before discharge by private sewer to the Wilton International site facility to the north of the installation before eventual discharge to the River Tees.

There are six point source emissions to air. Potential emissions are abated using a range of techniques as appropriate including wet scrubbing, bag filtration and carbon filtration. The Tees and Cleveland Coast (SAC/SPA/Ramsar and North York Moors (SAC/SPA) European Habitat sites are within 10km and there is also Wilton Woods complex local wildlife site and Wilton Wood ancient woodland within 2km.The potential environmental impact on these sites has been assessed as acceptable.

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

Status log of the permit		
Description	**Date**	**Comments**
Application EPR/YP3938JL/A001	Duly made 21/03/18	Application for inorganic chemicals production plant from Peak African Minerals Limited
Schedule 5 Notice	Dated 01/05/18	Response received 01/06/18 and 02/06/18
Applicant name change	01/06/18	Applicant changed to UK registered company Peak Technology Metals Limited during determination
Request for Information	Verbal	Site plan revised to include aqueous discharge point within installation boundary received 24/07/18
Request for Information	Dated 24/07/18	Revised addendum to Air Quality Assessment received 25/07/18
Permit determined EPR/YP3938JL (PAS Billing ref. YP3938JL)	31/08/18	Permit issued to Peak African Minerals Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/YP3938JL

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Peak Technology Metals Limited ("the operator"),

whose registered office is

St Ann's Wharf
112 Quayside
Newcastle Upon Tyne
United Kingdom
NE1 3DX

company registration number 11384963

to operate an installation at

Wilton Mineral Processing and Refining Facility
Wilton International
Middlesbrough
Tees Valley
TS6 8JH

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Philip Lamb	**31/08/2018**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan , and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazardous property associated with the waste, if applicable; and

(e) the waste code of the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 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.

3.3.2 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 which identifies and minimises the risks of pollution from odour;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration 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 noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

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 which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1, S3.2 and S3.3;

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production /treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 In the event:

(a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform the Environment Agency,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) of a breach of any permit condition the operator must immediately—

(i) inform the Environment Agency, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this

information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

(c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

(a) a decision by the Secretary of State not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State to terminate the agreement; and

(c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
AR1	S4.2 A(1)(a)(v)	Producing inorganic chemicals such as other inorganic compounds	Producing Medium/Heavy Rare Earth Carbonates
AR2	S4.2 A(1)(a)(v)	Producing inorganic chemicals such as other inorganic compounds	Producing Cerium Carbonate
AR3	S4.2 A(1)(a)(v)	Producing inorganic chemicals such as other inorganic compounds	Producing Lanthanum Carbonates
AR4	S4.2 A(1)(a)(v)	Producing inorganic chemicals such as metal oxides	Producing Neodymium/ Praseodymium Oxides
AR5	S5.4 A(1)(a)(ii)	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving Physico-Chemical treatment	Treatment of process waste water involving neutralisation, precipitation and clarification for discharge to Wilton International site facility
	Directly Associated Activity		
AR6	Waste storage and handling	Various Solid Wastes awaiting off-site transport	380 tonnes total bunkered waste
AR7	Raw Material storage and handling	Raw Materials associated with the scheduled activities	5000 tonnes Ore Concentrate
AR8	Product packing and storage	Various Rare Earth Inorganic Compounds awaiting transport off-site	1500 tonnes total products

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	• Sections 3 and 5 of Form B2 and sections 1-7 of Form B3 of the application documents. • Non-Technical Summary • Environmental Risk Assessment • BAT Assessment Document	Duly Made 21/03/18
Response to Schedule 5 Notice dated 01/05/18	Response to questions 2, 4, 7, and 8 of the Schedule 5 notice plus the following associated documents. • Water vole survey mitigation measures July 2017. • Operating Techniques v2 June 2018. • Generalised Management System Summary.	Received 01/06/18
Response to Schedule 5 Notice dated 01/05/18	Response to questions 5 and 6 of the Schedule 5 Notice plus Revised Addendum to Air Quality Assessment dated 25 July	Received 01/06/18 Received

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
	2018	25/07/18

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC 1	The operator shall submit a post-commissioning report to the Environment Agency which shall include, but not be limited to: • a review of performance of the facility against the conditions of this permit and the pre-commissioning report proposals • details of optimisation of emission abatement systems including reagent dosing rates. • details of procedures developed during commissioning for achieving and demonstrating satisfactory process control	Within 6 months of start of commissioning
IC2	Once normal, post commissioning, operation has been achieved the operator shall sample and analyse the typical treated effluent discharged at point W1 for analysis for: • All the constituents listed in the draft Sembcorp consent submitted in response to the application Schedule 5 notice. • All the elements in the Waste Streams Schematic Block Flow Diagram submitted as part of the application • The middle and heavy rare earths listed in Operating Techniques Document v2 section 2.6.20. A written report of the results shall be submitted to the Environment Agency. If a result is reported as zero the limit of detection of the analytical method must also be included. Where relevant each result must be compared against the expected concentration in the effluent submitted as part of the application.	Within 6 months of start of commissioning (or otherwise as agreed with the Environment Agency)

Table S1.4 Pre-operational measures	
Reference	**Pre-operational measures**
PO 1	At least 4 weeks (or any other date as agreed with the Environment Agency) prior to the start of construction the operator shall submit a written copy of the finalised detailed design for collection and discharge of foul water from waste buildings to public sewer (as described in Operating Techniques document v2 section 7.6.3).
PO 2	At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall provide a written commissioning plan (including timescales for completion) for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the measures to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved by the Environment Agency. No site operations shall commence at the installation unless the Environment Agency has given prior written permission under this condition.
PO 3	At least 4 weeks (or any other date as agreed with the Environment Agency) prior to the start of the introduction of raw earth concentrate to the installation the operator shall submit a written summary of the site Environmental Management System (EMS). This summary should outline the structure of the EMS and address the how the commitments made in the Management System Summary submitted in response to Schedule 5 notice dated 01/05/18 have been met with references to critical documents where necessary. No refining operations shall commence at the installation unless the Environment Agency has given prior written permission under this condition.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
-	-

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method[1]**
A1 [Point A1 on site plan in Schedule 7]	Concentrate handling dust extraction	Particulates	30 mg/m^3	1 hour	Quarterly	BS EN 13284-1
A2 [Point A2 on site plan in schedule 7]	Concentrate Drying and Calcining off-gas	Oxides of nitrogen (as NO_2)	100 mg/m^3	1 hour	Quarterly	BS EN 14792
		Particulates	30 mg/m^3	1 hour	Quarterly	BS EN 13284-1
		Sulphur Dioxide	400mg/m^3	1 hour	Quarterly	BS EN 14791
		Hydrogen Chloride	20 mg/m^3	1 hour	Quarterly	BS EN 1911
A3 [Point A3 on site plan in schedule 7]	Leach off-gas	Hydrogen Chloride	No limit set	1 hour	Quarterly	BS EN 1911
		Chlorine	No limit set	1 hour	Quarterly	US EPA Method 26/26A
A4 [Point A4 on site plan in schedule 7]	Solvent extraction off-gas	Class B VOCs (expressed as carbon	75 mg/m^3	1 hour	Quarterly	BS EN 13649
A5 [Point A5 on site plan in schedule 7]	Product area off-gas (including NdPr process off-gas and burner off-gas)	Oxides of nitrogen (as NO_2)	100 mg/m^3	1 hour	Quarterly	BS EN 14792
		Particulates	30 mg/m^3	1 hour	Quarterly	BS EN 13284-1
		Hydrogen Chloride	20 mg/m^3	1 hour	Quarterly	BS EN 1911
A6 [Point A6 on site plan in schedule 7]	HCl storage tank(s) off-gas	Hydrogen Chloride	20 mg/m^3	1 hour	Quarterly	BS EN 13284-1
A7 [Point A7 on site plan in schedule 7]	Concentrate drying and calcining burner off-gas	Oxides of nitrogen (as NO_2)	100 mg/m^3	1 hour	Quarterly	BS EN 14792

Note 1: Or otherwise as agreed in writing with the Environment Agency

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method[1]**
W1 [Point W1 on site plan in schedule 7]	Effluent Treatment plant	Total Fluoride (as NaF)	2.0 g/l	24 hour flow proportional sample	Monthly	BS EN 10304
		Total Barium (as BaCl2)	3.0 mg/l	24 hour flow proportional sample	Monthly	BS EN ISO 15586
		Total Aluminium (as AlCl3)	165.0 mg/l	24 hour flow proportional sample	Monthly	BS EN ISO15586
		Total Sulphate (as CaSO4)	11.3 g/l	24 hour flow proportional sample	Monthly	SCA Blue Book 136

Note 1: Or otherwise as agreed in writing with the Environment Agency

Table S3.3 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W2 [Point W2 on site plan in schedule 7] discharge to Kettle Beck	Site surface water runoff pond	No parameters set	-	-	-	-

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1.	A1, A2, A3, A4, A5, A6, A7	Every 12 months	1 January
Emissions to sewer Parameters as required by condition 3.5.1	W1	Every 3 months	1 January, 1 April, 1 July, 1 October

Table S4.2: Annual production/treatment	
Parameter	**Units**
Total Rare Earth Products	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material concentrate used	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	31/08/18
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	31/08/18
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	31/08/18
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	31/08/18
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	31/08/18

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	**Notification period**

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

"accident" means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Hazardous property” has the meaning in Annex lll of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

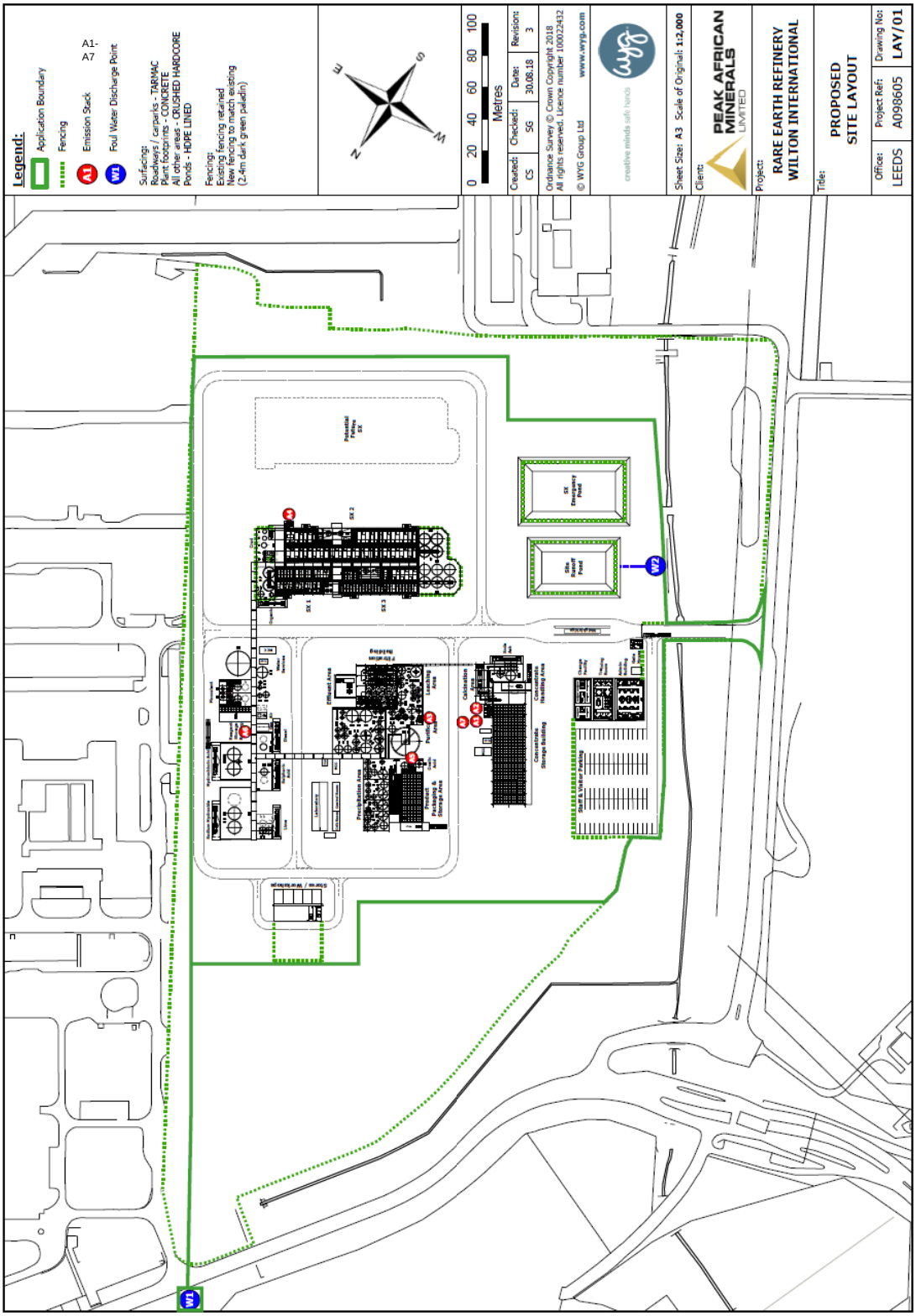
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels;
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT

Permit Number: YP3938JL

Operator: Peak Technology Metals Ltd

Facility: Wilton Minerals Processing and Refining Facility

Form Number: Air1 / 31/08/18

Reporting of emissions to air for the period from DD/MM/YYYY **to** DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Particulate Matter	30 mg/m3	1 hour period		BS EN 13284-1		
A2	Oxides of nitrogen (NO and NO2 expressed as NO2)	100 mg/m^3	1 hour period		BS EN 14792		
A2	Particulate Matter	30 mg/m3	1 hour period		BS EN 13284-1		
A2	Sulphur dioxide	400 mg/m3	1 hour period		BS EN 14791		
A2	Hydrogen chloride	20 mg/m3	1 hour period		BS EN 1911		
A3	Hydrogen chloride	No limit set	1 hour period		BS EN 1911		
A3	Chlorine	No limit set	1 hour period		US EPA Method 26/26A		
A4	Class B VOCs (expressed as Carbon)	75 mg/m3	1 hour period		BS EN 13649		
A5	Particulate Matter	30 mg/m3	1 hour period		BS EN 13284-1		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A6	Hydrogen chloride	20 mg/m3	1 hour period		BS EN 1911		
A7	Oxides of nitrogen (NO and NO2 expressed as NO2)	100 mg/m^3	1 hour period		BS EN 14792		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed …….. Date……..

(Authorised to sign as representative of Operator)

Permit Number: YP3938JL

Operator: Peak Technology Metals Ltd

Facility: Wilton Minerals Processing and Refining Facility

Form Number: Sewer1 / 31/08/18

Reporting of emissions to sewer for the period from DD/MM/YYYY **to** DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
W1	Total Fluoride (as NaF)	2.0 g/l	24 hour flow proportional sample		BS EN 10304		
W1	Total Barium (as $BaCl_2$)	3.0 mg/l	24 hour flow proportional sample		BS EN ISO 15586		
W1	Total Aluminium (as $AlCl_3$	165 mg/l	24 hour flow proportional sample		BS EN ISO 15586		
W1	Total Sulphate (as $CaSO_4$)	11.3 g/l	24 hour flow proportional sample		SCA Blue Book 136		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed …….. Date……..

(Authorised to sign as representative of Operator)

Permit Number:	**YP3938JL**	**Operator:**	**Peak Technology Metals Ltd**
Facility:	**Wilton Minerals Processing and Refining Facility**	**Form Number:**	**WaterUsage1 / 31/08/18**

Reporting of Water Usage for the year YYYY

Water Source	**Usage (m^3/year)**	**Specific Usage (m^3/unit output)**
Mains water		
Site borehole		
River abstraction		
TOTAL WATER USAGE		

Operator's comments:

Signed …….. Date……..

(authorised to sign as representative of Operator)

Permit Number: YP3938JL

Operator: Peak Technology Metals Ltd

Facility: Wilton Minerals Processing and Refining Facility

Form Number: Energy1 / 31/08/18

Reporting of Energy Usage for the year YYYY

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	**Primary Energy (MWh)**	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
TOTAL	**-**		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed …… Date……..

(Authorised to sign as representative of Operator)

Permit Number:	**YP3938JL**	**Operator:**	**Peak Technology Metals Ltd**
Facility:	**Wilton Minerals Processing and Refining Facility**	**Form Number:**	**Performance1 / 31/08/18**

Reporting of other performance indicators for year YYYY

Parameter	**Units**
Total Rare Earth Products Produced	tonnes
Total raw material concentrate used	tonnes

Operator's comments:

Signed …….. Date……..

(Authorised to sign as representative of Operator)