

# Permit with introductory note

# The Environmental Permitting (England & Wales) Regulations 2016

Novanta Technologies UK Limited Cambridge Technology Unit 1 -4 Sovereign Way Crown Industrial Estate Taunton TA2 8GQ

Permit number EPR/GP3809BJ

# Cambridge Technology Permit number EPR/GP3809BJ

## Introductory note

### This introductory note does not form a part of the permit

The main features of the permit are as follows.

The chemical site installation is to be operated by Novanta Technologies UK Limited. The grid reference for the centre of the site is ST 24321 25858. It is located approximately 2 km to the north east of Taunton.

There are four European /Ramsar Sites within 10 km of the installation, no Sites of Special Scientific Interest within 2km of the installation and five Other Conservation Sites within 2 km of the installation.

The main chemical activity within the installation is based on processes linked to usage of Beryllium under 4.2 A (1) (c) (iii).

The Operator plans to build this new installation and then subsequently and separate to this installation the Operator proposes to decommission and surrender their existing regulated installation under existing permit EPR/ZP3933UU at Factory 1.The Operator intends to also surrender their permit EPR/CP3136YP for a non-operational installation which is for an equivalent facility to this new installation.

#### **Activities**

The full list of activities linked to the installation include:

- 4.2 A(1) (c) (iii) "Any manufacturing activity involving the use of, or the use or recovery of, any compound of the following element beryllium"
- 2.3 B (a) " Any process for the surface treatment of metal which is likely to result in the release into air of any acid forming oxide of nitrogen and which does not fall within Part A(1) or Part A(2) of this section."

Specifically the installation volume is less than 30  $m^3$  and hence does not go under a 2.3 A (1) activity.

 5.4 A(1) (a) (ii) "Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste-water treatment – physico-chemical treatment."

The directly associated activities linked to this installation include storage and handling of raw materials, storage and handling of solid wastes, storage and handling of liquid wastes plus atmospheric abatement facilities and vacuum coating.

A summary of site process description is as follows:

- Machining of components made from Beryllium and a number of other conventional materials such as glass, silicon, silicon carbide, using conventional machine tools such as milling machine, lathes, wire electro discharge machines (EDM).
- Finishing operation involving: Smoothing, Plating (surface treatments), Heat Treatment, Polishing, Cleaning, Vacuum Coating. Administration: Production Engineering, Quality, Despatch, Finance.
- There is also associated raw materials and waste storage.

#### **Emissions**

There are five atmospheric emissions linked to the installation and one emission to sewer and one emission to surface water.

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/GP3809BJ/A001	Duly made 04/03/20					
Additional information received	16/03/20	Site name confirmation				
Schedule 5 dated 13/3/20	02/06/20,25/06/20,12/08/20,17/08/20 and 24/08/20	Risk assessment and operating techniques details				
Additional information received	05/06/20 and 25/06/20	Site condition report update and effluent flow meter details				
Additional information received	01/10/20 and 02/10/20	Final Site Condition report , emission location plan and final environmental risk assessment				
Permit determined EPR/GP3809BJ (Billing reference. GP3809BJ)	05/10/20	Permit issued to Novanta Technologies UK Limited.				

End of introductory note

## Permit

## The Environmental Permitting (England and Wales) Regulations 2016

#### Permit number

#### EPR/GP3809BJ

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

Novanta Technologies UK Limited ("the operator"),

whose registered office is

29 Holton Road Holton Heath Poole Dorset BH16 6LN

company registration number 1041317

to operate an installation at

Cambridge Technology Unit 1-4 Sovereign Way Crown Industrial Estate Taunton TA2 8GQ

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

Name	Date
Philip Lamb	05/10/2020

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 and S3.2 unless 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 performance parameters set out in schedule 4 table S4.2 using the forms specified in table S4.3 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 S4.3; 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 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.
- 4.3.4 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.
- 4.3.5 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

#### 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 A	ctivities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity	
AR 1	S4.2 A(1) (c) (iii) Any manufacturing activity involving the use of, or the use or recovery of, any compound of the following element - beryllium	Manufacture or repair using beryllium	From transfer of raw materials from storage areas to removal of solid waste and discharge of liquid effluent	
AR 2	2.3 B (a) Any process for the surface treatment of metal which is likely to result in the release into air of any acid-forming oxide of nitrogen and which does not fall within Part A(1) or Part A(2) of this Section.	Electroless and Electrode Surface Treatment Activities with release of Acid Forming Gases.	From transfer of raw materials from storage areas to removal of solid waste and discharge of liquid effluent. Surface treatment vat volume < 30 m3. Maximum vat volume capacity of 25 m3.	
AR3	5.4 A (1) (a) (ii) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste-water treatment via physico-chemical treatment.	Process Effluent On site Effluent Treatment Plant (ETP)	From storage of process effluent prior to treatment to final sewer discharge. Maximum mean daily treatment of 86 m3/day.	
	Directly Associated Activity			
AR4 Surface treatment processes		Alochrom Dip Surface Treatment Activity without release of Acid Forming Gases.	From transfer of raw materials from storage areas to removal of solid waste and discharge of liquid effluent. Surface treatment Alochrom vat volume < 30 m3. Maximum vat volume capacity of 0.1 m3	
AR5 Storage and handling of raw materials		Storage and handling of process raw materials	From receipt of raw materials to locations to transfer for processing in AR1 and AR2 scheduled activities.	
AR6	Storage and handling of solid wastes	Storage and handling of machining swarf, offcuts, soiled wipes, spent filter elements	From separation of wastes to despatch from installation	

Table S1.1 Activities						
Activity Activity listed in Schedule 1 reference of the EP Regulations		Description of specified activity	Limits of specified activity			
AR7	Storage and handling of liquid wastes	Storage and handling of aqueous, solvent and oil/emulsion wastes	From separation of wastes to despatch from installation			
AR8	Atmospheric abatement	Particulate HEPA filter abatement (A1 emission) and Wet Scrubber Abatement of A4 emissions	From local ventilation capture to discharge of atmospheric emissions post abatement via A1 and A4 stacks			
AR9	Vacuum coating ( without solvent usage)	Storage and handling of components for vacuum coating	From receipt of materials for coating to final storage of components after coating process			

Table S1.2 Operating techniques					
Description	Parts	Date Received			
Application	Application form B3 section 3 plus all application supporting information and duly making responses.	Duly made 04/03/20			
Additional information	All: final Site Condition report and Effluent flow meter Mcerts certification details	05/06/20 and 25/06/20			
Response to Schedule 5 Notice dated 13/03/20	All; including Effluent Treatment Plant design, Fugitive emission contriols, Atmospheric Abatement design and Fire Water Management.	02/06/20 , 25/06/20,12/08/20,17/08/20 and 24/08/20			
Additional Information	Final Site Condition report , emission location plan and final environmental risk assessment	01/10/20 and 05/10/20			

Table S1.3 I	Table S1.3 Improvement programme requirements						
Reference	Requirement	Date					
IC 1	The Operator shall submit a written report to the Environment Agency on the commissioning of the new production plant as detailed in application EPR/GP3809BJ/A001 in compliance with commissioning protocol agreed in writing by the Environment Agency under pre-operational condition PO1.The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the application EPR/GP3069BJ/A001 including but not limited to the submission of atmospheric and effluent monitoring data to confirm installation performs in line with emission levels detailed in application H1 assessment dated 17/08/20 The improvement condition will be deemed to have been complied with, on approval in writing by the Environment Agency.	3 months after completion of commissioning of new installation.					

Table S1.4 Pre-o	Table S1.4 Pre-operational measures				
Reference	Pre-operational measures				
1	At least 4 weeks before operation the operator shall submit a report on the final commissioning protocol plan for validating the installation emissions to atmosphere and effluent are in line with final H1 assessment provided on 17/08/20				
	The report shall confirm monitoring program with monitoring in compliance with relevant Mcerts standards				
	The Environment Agency shall confirm in writing the approval of this pre-operational condition.				
2	At least 4 weeks before operation the operator shall submit a report on the final operating techniques for the installation with specific reference to minimization of environmental emissions. The report shall include but not be limited to :				
	<ul> <li>Details of any changes to the operating techniques submitted within EPR/GP3089BJ/A001 application</li> </ul>				
	<ul> <li>Confirmation that all the emissions levels detailed in the application EPR/GP3089BJ/A001 are to be complied with ; this should include actions to target reduction of effluent emissions at levels 50 % of H1 assessment dated 17/08/20.</li> </ul>				
	• Summary of how all bunds within the installation will comply with "Containment systems for the prevention of pollution (C736)" guidance				
	The Environment Agency shall confirm in writing the approval of this pre-operational condition				
3	<ul> <li>The Operator shall submit a final proposal for the storage, assessment and discharge in a controlled manner of contaminated fire water in the event of an incident.</li> <li>The proposal shall ensure sufficient contained storage volume is available for temporary storage of fire water run-off.</li> <li>The proposal shall include but not be limited to: <ul> <li>Emergency contained storage facilities for fire water with final storage volumes inside and external to main process building.</li> <li>Final emergency procedures including sampling, assessment criteria and disposal procedures for handling such fire water</li> </ul> </li> </ul>				
	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

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [ Point A5 on site plan in schedule 7}	Polishing. Post polishing , ppe gown, effluent treatment and flip flop drop off	Beryllium and its compounds (as Be)	0.05 μg/Nm <sup>3</sup> 3 monthly average	-	Monthly	BS EN 14385
A1 [Point A5 on site plan in schedule 7]	Polishing. Post polishing , ppe gown, effluent treatment and flip flop drop off	Beryllium and its compounds (as Be)	0.1 μg/Nm <sup>3</sup> Maximum limit	Periodic over minimum 30 minute, maximum 8 hour period	Monthly	BS EN 14385
A2 [Point A1.01 on site plan in schedule 7]	Machine Shop Change in and Prewash	Beryllium and its compounds (as Be)	0.05 μg/Nm <sup>3</sup> 3 monthly average		Monthly	BS EN 14385
A2 [Point A1.01 on site plan in schedule 7]	Macine Shop Change in and Prewash	Beryllium and its compounds (as Be)	0.1 μg/Nm <sup>3</sup> Maximum limit	]-	Monthly	BS EN 14385
A3 [Point A1.02 on site plan in schedule 7]	Spray Booths Pitch and Block	No parameters set	No limit	-	-	-
A4 [Point A34 on site plan in schedule 7]	Scrubber vent linked to Nickel Plating	No parameters set	No limit	-	-	-
A5 [Point A2 on site plan in schedule 7]	Fume Cupboard in Post Polishing	No parameters set	No limit	-	-	-

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and	
monitoring requirements	

5 1						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 (S1 on site plan) in schedule 7	Roof and welfare facility uncontaminated water	No parameters set	No limit	-	-	-

Table S3.3 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	
S1 (W1 on site plan) in	Site effluent	Maximum daily flow	86 m <sup>3</sup> d <sup>-1</sup>	Not applicable	Continuous	MCERTS certified	
schedule 7 via Ham Sewage Treatment Works and final discharge to River Tone	treatment plant	Maximum instantaneous flow rate	5   s <sup>-1</sup>	Not applicable	Continuous	flow meter	
		Beryllium and its compounds	No limit set	24-hour flow proportional sample		BS EN ISO 11885	
		Nickel and its compounds	No limit set	24-hour flow proportional sample	Monthly		
		Suspended Solids	No limit set	24-hour flow proportional sample		BS EN 872	

# 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	Every 3 months	1 January, 1 <sup>st</sup> April,1 <sup>st</sup> July and 1 <sup>st</sup> October
Emissions to sewer Parameters as required by condition 3.5.1.	S1	Every 3 months	1 January, 1 <sup>st</sup> April,1 <sup>st</sup> July and 1 <sup>st</sup> October

Table S4.2 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	Tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes
Beryllium waste for recycling	Annually	Kg
Beryllium-contaminated solid wastes for disposal	Annually	Kg
Other solid wastes for disposal	Annually	Kg

Table S4.3 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	05/10/20
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	0510/20
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	05/10//20
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	05/10/20
Waste and Raw Material Usage	Form waste 1 or other form as agreed in writing by the Environment Agency	05/10/20

# 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			

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

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

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.

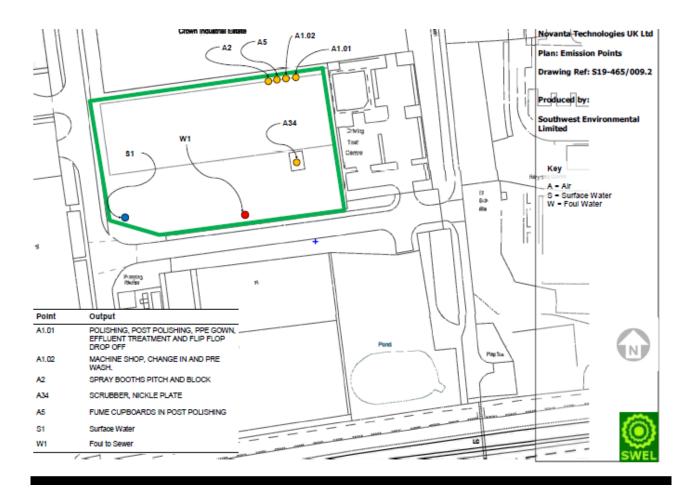
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- 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; and/or
- 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

#### **Installation Boundary Plan**



Site centred on NGR ST 24321 25858

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**END OF PERMIT** 

**Reporting forms** 

Permit Number:	GP3809BJ	Operator:	Novanta Technologies UK Limited.
Facility:	Crown Close Optics & Structures	Form Number: Water Usage 1 DD/MM/YY	

## Reporting of Water Usage for the year DD/MM/YYYY to DD/MM/YYYY

Water Source	Usage (m <sup>3</sup> /year)	Specific Usage (m <sup>3</sup> /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:	GP3809BJ	Operator:
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#### Facility: Crown Close Optics & Form Number: Structures Energy Usage 1 DD/MM/YY

## Reporting of Energy Usage for the year DD/MM/YYYY to DD/MM/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:	GP3809BJ	Operator:
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#### Facility: Crown Close Optics & Form Number: Structures Air 1 DD/MM/YY

# 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 <sup>[1]</sup>	Test Method	Sample Date and Times <sup>[3]</sup>	Uncertainty [4]		
A1	Beryllium	0.1 µg/Nm3 (maximum limit)	Periodic over minimum 30 minutes,		BS EN 14385				
A1	Beryllium	0.05 µg/Nm3	maximum 8 hour period	Month 1					
		3 month average		Month 2					
		limit				Month 3			
				3 month average		n/a	n/a		
A2	Beryllium	0.1 µg/Nm3 (maximum limit)	Periodic over minimum 30 minutes, maximum 8		 BS EN 14385				
A2	Beryllium	0.05 µg/Nm3	hour period	Month 1					
		3 month average		Month 2					
		limit		Month 3					
				3 month average		n/a	n/a		

- 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)

GP3809BJ	Operator:
Crown Close Optics a Structures	& Form Number: Sewer 1 DD/MM/YY
	Crown Close Optics

# 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 <sup>[1]</sup>		Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty [4]			
64	Flow (Daily)	86m3d-1	Continuous			Mcerts certified					
S1	Flow (Instantaneous)	5l s-1				flow meter					
	Beryllium	No limit	24-hour flow proportional	Month 1		BS EN ISO					
	and its compounds			Month 2	11885 11885						
			sample	Month 3							
	Nickel	-		Month 1							
	and its			Month 2							
	compounds			Month 3							
	Suspended			Month 1		BS EN 872					
	Solids						Month 2				
				Month 3							

 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.
- 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. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.
- 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:	GP3089BJ	Operator:	Novanta Technologies UK Limited.
Facility:	Crown Close Optics & Structures	Form Number: Waste 1 DD/MM/YY	

# Reporting of Raw Material Usage and Waste Production for the year DD/MM/YYYY to DD/MM/YYYY

Waste Type	Reporting frequency	Specific Usage or Waste Production in kg
Beryllium waste for recycling	Annually	
Beryllium-contaminated solid wastes for disposal	Annually	
Other solid wastes for disposal	Annually	
Raw Materials Usage	Annually	

Operator's comments:	
Signed	Date

(Authorised to sign as representative of Operator)