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Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

RTI Advanced Forming Limited

Watchmead Chemical Machining of Titanium Plant Watchmead Welwyn Garden City Hertfordshire AL7 1LT

Variation application number

EPR/VP3132FV/V005

Permit number

EPR/VP3132FV

Watchmead Chemical Machining of Titanium Plant Permit number EPR/VP3132FV

Introductory note

This introductory note does not form a part of the notice.

RTI Advanced Forming Limited operates the installation at Watchmead Chemical Machining of Titanium Plant. The installation is centred on National Grid Reference TL 25172 12832 and located immediately to the east of Welwyn Garden City.

The installation is involved with the forming of titanium components and etching of titanium components (either made on site or supplied by customers) for the aerospace industry.

The forming of titanium sheets is achieved by either hot forming (HF) or super plastic forming (SPF) and the etching is achieved by chemical machining. Ancillary to the main process are a number of associated and linked processes including storage of chemicals; solvent cleaning; aqueous degreasing; grit blasting; maskant application; fume scrubbing; effluent treatment; waste chemical collection; acid pickling; alkaline descaling; boron nitride application; hot form lubricant application; NDT inspection, rinsing and effluent treatment.

There are numerous point source emissions to air, with and without abatement, arising from this installation as listed in Table 2.2.2; with the main parameters being hydrogen fluoride, NOx, particulates and VOCs. There are two point source emissions to sewer arising from the chemical process rinses, NDT wastewater discharge and boron nitride wash-off booth as listed in Table 2.2.7

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit. Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. Only the variations specified in schedule 1 are subject to a right of appeal.

This variation is in consequence of an application made by the operator to reflect the following key changes

• Improvements to the existing Effluent Treatment Plant (ETP) including

- The addition of 5 tanks for balancing and settling
- The construction of 2 tanks (sulphuric acid and sodium hydroxide) for pH adjustment
- The construction of an "equipment kiosk" to house the chemically active part of the ETP.
- The construction of bunding including screening to contain the plant

The purpose of this variation is to improve ETP process control and provide a robust system to minimise environmental impacts to sewer. There are no changes to air emissions with this variation application.

- Addition of relevant scheduled activity for ETP plant -5.3 A(1) (a) (ii)
 - Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities (ii) physico-chemical treatment.'
 - The capacity of this is now updated above threshold to treat 96 m³ per day. The table S1.1 has been updated to change ETP from a directly associated activity to a scheduled activity.
- Correction of pickling activity this is confirmed as a scheduled Activity 2.3 (B) (a), rather than
 existing directly associated activity. There are no changes to the pickling process introduced within
 this variation.

Two improvement conditions IC4 and IC5 have been updated as a result of this variation.

The main chemical activity remains unchanged with this variation and there are no changes to the installation boundary.

The schedules specify the changes made to the 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	Status log of the permit				
Description	Date	Comments			
Application NP3333BH (EPR/NP3333BH/A001)	Duly made 07/01/05	Permit issued to Aeromet International PLC			
Request for additional information	18/07/05	Response received 19/07/05			
Request for additional information	08/08/05	Response received 08/08/05			
Permit issued (EPR/NP3333BH)	24/08/05				
Application for a variation VP3738LJ (EPR/NP3333BH/V002)	Duly made 12/04/06				
Request for additional information	21/07/06	Response received 25/04/06			
Request for additional information	16/05/06	Response received 17/05/06			
Variation issued (EPR/NP3333BH/V002)	17/08/06	Effective 01/06/08			
Application for a variation QP3339XP (EPR/NP3333BH/V003)	Duly made 17/12/07				
Request for additional information	09/05/08	Response received 14/05/08			
Variation issued (EPR/NP3333BH/V003)	28/05/08	Effective 01/06/08			
Transfer application VP3132FV (full transfer of permit EPR/NP33333BH)	Duly made 31/08/11	Application to transfer permit to Aeromet Advanced Forming Limited.			
Transfer issued (EPR/VP3132FV/T001)	23/11/11				
Notification of company name and address change	16/12/11				
Variation issued (EPR/VP3132FV/V002)	25/01/12	Permit issued to RTI Advanced Forming Limited			
Application for a variation (EPR/VP3132FV/V003)	Duly made 25/01/2016				
Variation issued EPR/VP3132FV/V003 [Billing Ref: RP3432RX]	18/03/2016	Variation issued			
Notified of change of company name	25/07/16	Request for registered office address changed to 26A Atlas Way, Sheffield, S4 7QQ			
Variation issued EPR/VP3132FV/V004	16/09/16				
Application for a variation EPR/VP3132FV/V005	Duly made 25/09/2017				

Status log of the permit			
Description	Date	Comments	
Schedule 5 response	13/10/17 , 25/10/17 and 09/11/17		
Request for information response	20/11/17		
Variation issued EPR/VP3132FV/V005 [Billing Ref: YP3931YM]	05/01/18		

End of introductory note

Notice of variation and consolidation

The 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 and consolidates

Permit number

EPR/VP3132FV

Issued to

RTI Advanced Forming Limited ("the operator")

whose registered office is

26a Atlas Way Sheffield England S4 7QQ

company registration number 07754118

to operate a regulated facility at

Watchmead Chemical Machining of Titanium Plant Watchmead Welwyn Garden City Hertfordshire AL7 1LT

to the extent set out in the schedules.

The notice shall take effect from 05/01/2018

Name	Date
Anne Nightingale	05/01/18.

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 - consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/VP3132FV

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/VP3132FV/V005 authorising,

RTI Advanced Forming Limited ("the operator"),

whose registered office is

26a Atlas Way

Sheffield

England

S4 7QQ

company registration number 07754118

to operate a regulated facility at

Watchmead Chemical Machining of Titanium Plant Watchmead Welwyn Garden City Hertfordshire AL7 1LT

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

Name	Date
Anne Nightingale	05/01/18.

Authorised on behalf of the Environment Agency

1. General

1.1 Permitted Activities

1.1.1 The Operator is authorised to carry out the activities and the associated activities specified in

Table 1.1.1 Activities		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Chemical Machining: Section 4.2 A (1) (b) - Unless falling within another Section of this Schedule, any manufacturing activity which is likely to release into air of any hydrogen halide (other than the manufacture of glass or the coating, plating or surface treatment of metal) or which is likely to result in the release into air or water of any halogen or any compounds mentioned in paragraph (a) (vi), other than the treatment of water.	The chemical machining of: On site formed titanium components or customer supplied titanium components for the aerospace industry	From the receipt of titanium sheets and customer supplied titanium components. Through to the dispatch of Titanium components, including the following activities: • the Super- Plastic and Hot forming of titanium sheets. • the chemical machining of titanium components
Section 5.3 A(1) (a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities physico-chemical treatment;	Hazardous Waste Treatment	Receipt and storage of site activities generated effluent, followed by pH adjustment treatment of process effluent from the installation prior to discharge from site to foul sewer. Effluent treatment plant capacity 96 m³/day.
Section 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	Acid Pickling	Acid Pickling of onsite formed titanium components and supplier supplied titanium components
Directly Associated Activity	The Storage of Chemicals	From receipt to use of chemicals on site
Directly Associated Activity	Aqueous degreasing	All equipment associated with Aqueous Degreasing of titanium sheets/components

Table 1.1.1 Activities		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Directly Associated Activity	Grit Blasting	All equipment associated with Grit Blasting of Titanium components
Directly Associated Activity	Maskant Application	The application of Maskant, through to scribing and removal of maskant on titanium components
Directly Associated Activity	Fume scrubbing	The exhaust air from the chemical machining tanks and the acid pickle tank, to abatement followed by release to air
Directly Associated Activity	Waste Chemical collection, handling and storage	From generation of waste to removal offsite
Directly Associated Activity	Alkaline Descaling	Alkaline Descaling of onsite formed titanium components and supplier supplied titanium components
Directly Associated Activity	Boron Nitride and Hot Form lubricant Application	The application of Boron Nitride or Hot Form lubricant to Titanium sheets prior to either Super Plastic forming or Hot forming
Directly Associated Activity	Hot & Super Plastic Forming	The Super Plastic forming or Hot forming of Titanium sheets
Directly Associated Activity	NDT Inspection	NDT application through to inspection of superplastic formed or hot formed titanium components
Directly Associated Activity	Belt linisher	All equipment associated with linishing titanium sheets

1.2 Site

1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green line on the Site Plan at Schedule 5 to this Permit.

1.3 Overarching Management Condition

1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

1.4 Improvement Programme

1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Environment Agency within 14 days of the completion of each such requirement.

Table 1.4.	1: Improvement programme	
Reference	Requirement	Date
1	The Operator shall complete an annual review of solvent usage and solvent replacement programme.	Complete
	The review shall include details of:	
	solvent usage,	
	potential replacements for solvents/solvent containing materials,	
	and other solvent replacement options such as the change of inks used for identification marking	
	The Operator shall submit an annual report of solvent usage and the progress made on solvent substitution.	
2	The Operator shall conduct an assessment of monitoring methods (for emissions to atmosphere and discharges to foul sewer air) including assessment of test results and procedures, both in-house and those employed by external parties.	Complete
	The Operator shall have regard for the Agency sector guidance for surface treatment (IPPC 2.07) and inorganic chemicals (IPPC 4.03), and in relation to monitoring of emissions to atmosphere Agency monitoring guidance documents M1, M2 and M18 and the methods detailed therein.	
	The operator shall identify Mcerts/UKAS accredited monitoring methods for any spot check monitoring in relation to emissions to atmosphere, and UKAS accredited monitoring for discharges to sewer.	
	Based on this, a revised monitoring programme shall be submitted to the Agency and agreed in writing.	
3	The Operator shall provide a further report to the Agency a report detailing improvements to the rinse techniques used in terms of reducing both the water usage and emissions to sewer. The report shall identify BAT options and where necessary the report should include details for upgrading or replacement on BAT techniques. The report shall provide a plan with time-scales for the implementation of the improvements identified that shall be agreed by the Agency in writing.	Complete
4	The operator shall review the bunding added or modified linked to variation EPR/VP3132FV/V005 on site and provide a report with detailed specification of all such bunding including final as built containment volume and calculations to demonstrate bunding design to allow for containment of jetting risks in line with new CIRA 736 guidance note.	4 months after completion of updated Effluent Treatment Plant commissioning
	The report shall also include an improvement programme for the upgrade of any areas not meeting the new CIRA 736 guidance note	
5	The Operator shall submit a written report to the Environment Agency on the commissioning of the upgraded effluent treatment installation as detailed in application EPR/VP3132FV/V005 in line with pre-operational condition PO1 commissioning protocol. If the final effluent discharge emissions are not in compliance with benchmarks as detailed in EPR/VP3132FV/V005 the report shall provide a plan with timescales for implementation of improvements to ensure	4 months after completion of updated Effluent Treatment Plant commissioning

Table 1.4.	1: Improvement programme	
Reference	Requirement	Date
	compliance. This plan shall be actioned after approval in writing by the Environment Agency.	
6	The Operator shall assess the feasibility of reducing the number of sewer discharge points, so that all effluent generated on site may be treated in the onsite effluent treatment plant.	Complete
	The Operator shall submit a report on this study.	
	The report should include details of any releases that may not be treated in the onsite Effluent Treatment Plant	
7A	The Operator shall develop an Environmental Management System and obtain third party accreditation (either ISO14001 or EMAS)	Complete
	The operator shall provide an update report on the progress made in obtaining an third party accredited, (either ISO14001 or EMAS) Environmental Management System. The report shall include a timescale for obtaining accreditation for the EMS	
7B	The operator shall then obtain accreditation by the date specified in the above report	Complete
8	The operator shall review the current Effluent Treatment undertaken on site.	Complete
	The review shall include, and not limited to:	
	assessment of current treatment techniques in relation to normal operational loading and extreme operational loading on the plant	
	Monitoring methods relating effluent parameters detailed in table 2.2.8	
	alarm systems relating to pH exceedances	
	The Operator shall submit a report on the review, including any identified proposed improvements and timescales to the Environment Agency	
9	The Operator shall monitor solvent emissions from Boron Nitride, Hot Form Lubricant and NDT Penetrant usage on a daily basis, commencing no later than 1st October 2006 for 6 months.	Complete
	The Operator shall provide solvent emission data (daily, weekly and monthly maximum, minimum and averaged usage) to the Agency.	

1.4.2 Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 the Operator shall send written notification of such failure to the Environment Agency within 14 days of such date.

1.5 Minor Operational Changes

- 1.5.1 The Operator shall seek the Environment Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Environment Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Environment Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in

- accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 1.5.3 When the qualification "unless otherwise agreed in writing" is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Environment Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Environment Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique, and relevant provisions in the Application and the Site Protection and Monitoring Programme, as the case may be shall be deemed to be amended.

1.6 Pre-Operational Conditions

1.6.1 The operations specified in schedule 1 table 1.5.1 shall not commence until the measures specified in that table have been completed.

	Pre-operational condition	
Reference	Operation	Pre-operational measures
PO1	Commissioning with raw materials of upgraded Effluent Treatment Plant	At least 2 weeks before the start of facility commissioning with raw materials the Operator shall provide a written commissioning plan, including timelines 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 of the updated effluent treatment plant
		The plan is to specify expected duration of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions.
		The plan shall give particular attention to the schedule of effluent monitoring data to provide evidence of effectiveness of updated effluent treatment to show compliance with design data supplied in variation application EPR/VP3132FV/V005
		Commissioning shall be carried out in accordance with the commissioning plan as approved in writing by the Environment Agency.

1.7 Off-site Conditions

1.7.1 There are no off-site conditions

2. Operating conditions

2.1 In-Process Controls

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Environment Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques				
Description	Parts	Date Received		
Application NP3333BH (EPR/NP3333BH/A001)	The response to questions 2.1 and 2.2 given in sections 2.1 Main Activities and Abatement, Section 2.2 Control of Emissions and Appendix F, Process Flow Diagram of the application	Sections 2.1, 2.2 and Appendix F as received in the submitted Application 21st December 2004, and amended Appendix F submitted 19th July 2005		
Application for Variation VP3738LJ (EPR/NP3333BH/V002)	The response to questions 2.1 and 2.2 given in sections C2.1 Changes to Installation Activities, Section C2.2 Control of Emissions	Sections C2.1, C2.2 as received in the submitted variation application 31/03/2006		
Application for Variation QP3339XP (EPR/NP3333BH/V003)	The response to questions 2.1 and 2.2 given in sections C2.1 Changes to Installation Activities, Section C2.2 Control of Emissions	Sections C2.1, C2.2 as received in the submitted variation application 14/12/2007		
Application for variation EPR/VP3132FV/V003	All of the Technical Summary of application for permit application document and Request for further information response dated 25/01/2016 detailing the Accident prevention and control measures, SOP Doc Ref 10/2709 and Best Available Techniques	Duly made 25/01/2016		
Application for variation EPR/VP3132FV/V005	Variation application form C3 section 3 plus all application supporting information and duly making responses	Duly made 25/09/2017		
Schedule 5 response	All	13/10/17, 25/10/17 and 09/11/17.		
Request for information response	All	20/11/17		

2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit (as amended from time to time under condition 4.1.7), or as otherwise agreed in writing by the Agency.

2.2 Emissions

- 2.2.1 Emissions to Air, (including heat, but excluding Odour, Noise or Vibration) from Specified Points
- 2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.
- 2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the source(s) specified in that Table.

Table 2.2.1 : Emission points to air				
Emission point reference or description	Source	Location of emission point		
A1	Fume Scrubber Stack (caustic scrubber/Droplet eliminator)	Point A1 on the emissions plan in schedule 5		
A2	Alkaline Degrease and Caustic degrease tanks stack	Point A2 on the emissions plan in schedule 5		
A4	Maskant Spray Booth (post particulate filter)	Point A4 on the emissions plan in schedule 5		
A5	Maskant Drying Booth Stack	Point A5 on the emissions plan in schedule 5		
A7	Boron Nitride and Hot Form Lubricant spray booth stack (post particulate filter)	Point A7 on the emissions plan in schedule 5		
A8	NDT Penetrant spray booth stack (post particulate filter)	Point A8 on the emissions plan in schedule 5		
A9	NDT Developer powder spray booth (post particulate filter)	Point A9 on the site plan		
A13	Alkaline descale tank	Point A13 on the emissions plan in schedule 5		
A14	Sand blast unit 1	Point A14 on the emissions plan in schedule 5.		
A15	Sand blast unit 2	Point A15 on the emissions plan in schedule 5.		
A16	Belt linisher dust extraction	Point A16 on the emissions plan in schedule 5.		

2.2.1.3 The limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 :	Emission limits to	o air and monitoring		
Emission point reference	Parameter	Limit (including Reference Period)	Monitoring frequency	Monitoring Method
A1	NOx	40 mg/m³ daily average. Maximum peak emission of 200 mg/m3 Minimum 1hr monitoring period	Annual,	ISO 14792,
A1	HF	2.0 mg/m³, over 1hr monitoring period Minimum 1hr monitoring period	Annual	ISO 15713
A4	Particulates	20 mg/m ³ , 1 hr monitoring period	Annual	
A7	Particulates	20 mg/m ³ , 1 hr monitoring period	Annual	BS EN 13284-1
A8	Particulates	20 mg/m ³ , 1 hr monitoring period	Annual	
A9	Particulates	20 mg/m ³ , 1 hr monitoring period	Annual	
A14	Particulates	20 mg/m ³ , 1 hr monitoring period	Annual	
A15	Particulates	20 mg/m ³ , 1 hr monitoring period	Annual	
A16	Particulates	20 mg/m³, 1 hr monitoring period	Annual	
A4	Class B VOC's	1.5kg/day as "C", averaged over	Annual	
A5	Class B VOC's	working week combined for Release Points A4 & A5 (effective from 1st July 2008) Note 1	Annual	BS EN 12619
A7	Class B VOC's	10kg/day as "C" weekly average. Note 1	Annual	
A8	Class B VOC's	1kg/day as "C" weekly average. Note 1	Annual	

Note 1 Monitoring methods to be reviewed by and amended if required by the Environment Agency when the monitoring method changes in M2 Mcerts Guidance.

Note 2 Emission limits are based on an averaged daily usage of solvents rather than an emission concentration limit, due to the production process.

^{2.2.1.4} Total emissions to air from emission point(s) set out in Table 2.2.1 in any year of a substance listed in Table 2.2.3 should not exceed the relevant limit in that Table.

Table 2.2.3 Annual limits	
Substance	Limit – kg
VOC's Class B – cleaning of titanium sheets	1999

- 2.2.2 Emissions to water (other than groundwater), including heat, from specified points
- 2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.
- 2.2.2.2 Conditions 2.2.2.3 2.2.2.6 shall not apply to emissions to sewer.
- 2.2.2.3 No emission from the Permitted Installation shall be made to water.

No condition applies.

No Condition applies.

No Condition applies.

Emissions to sewer

2.2.2.7 Emissions to sewer from the specified emission points in Table 2.2.7 shall only arise from the source(s) specified in that Table.

Table 2.2.7 Emission points to sewer			
Emission point reference or description	Source	Sewer	
S1	Chemical process rinses discharged to sewer after onsite effluent treatment, and NDT penetrant wash off booth rinse water discharges, after onsite filtration.	Sewerage Undertakers Foul Sewer	
S2	Boron nitride wash off booth discharge	Sewerage Undertakers Foul Sewer	

The limits for the emissions to sewer for the parameter(s) and emission point(s) set out in Table 2.2.8 shall not be exceeded.

Table 2.2.8 : Emission limits and monitoring frequency to sewer				
Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
S1	рН	6 – 11 (Continuous)	Continuous	BS ISO 10523

- 2.2.2.9 Where a substance is specified in Table 2.2.8 but no limit is set for it, the concentration of such substance in emissions to sewer from the relevant emission point shall be no greater than the background concentration.
- 2.2.2.10 Total emissions in any year of a substance listed in Table 2.2.9 shall not exceed the relevant limit in that Table

Table 2.2.9 Annual emission limit		
Substance	Annual limit – kg	
Mercury	0.5kg	
Cadmium	1.0kg	

2.2.3 Emissions to groundwater

- 2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall use BAT to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application

2.2.4 Fugitive emissions of substances to air

The Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:

- storage areas
- buildings
- pipes, valves and other transfer systems
- open surfaces

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5 Fugitive emissions of substances to water and sewer

- 2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:
 - · all structures under or over ground
 - surfacing

- bunding
- storage areas

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

2.2.6 Odour

- 2.2.6.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:
 - · limiting the use of odorous materials
 - · restricting odorous activities
 - · controlling the storage conditions of odorous materials
 - controlling processing parameters to minimise the generation of odour
 - · optimising the performance of abatement systems
 - · timely monitoring, inspection and maintenance
 - employing, where appropriate, an approved odour management plan

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

No Condition applies

No Condition applies.

2.2.7 Emissions to Land

- 2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.
- 2.2.7.2 No emission from the Permitted installation shall be made to land.

No condition applies.

2.2.8 Equivalent Parameters or Technical Measures

2.2.8.1 The Operator shall comply with the requirements specified in Table 2.2.11, which supplement or replace emission limit values in accordance with Regulation 12(8) of the PPC Regulations.

Table 2.2.11 Equivalent parameters and technical measures		
Parameter or measure	Requirement or description of measure, and frequency if relevant	
NOx	Continuous monitoring using in-house continuous emissions monitor. The continuous emissions monitor to be available for at least 50% working time, averaged over each working month	
Class B VOC's used in maskant application and lubricant usage, and other surface cleaning	Annual report detailing non VOC replacements options and progress made.	
Particulates arising from belt linisher and associated equipment	Monitoring programme and regular process controls to monitor the levels of particulates, in particular titanium dust, arising from the belt linishing process.	

2.3 Management.

2.3.1 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

Training

- 2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.
- 2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

Maintenance

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:
- 2.3.6.1 a written or electronic maintenance programme; and
- 2.3.6.2 records of its maintenance.

Incidents and Complaints

- 2.3.7 The Operator shall maintain and implement written procedures for:
- 2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits; and
- 2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and
- 2.3.7.3 ensuring that detailed records are made of all such actions and investigations.
- 2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

2.4 Efficient use of raw materials

- 2.4.1 The Operator shall -
- 2.4.1.1 maintain the raw materials table or description submitted in Section 2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;
- 2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Environment Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Environment Agency at least every 4 years thereafter; and
- 2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.5 Waste Storage and Handling

2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on the Permitted installation such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.

2.5.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be:
- 2.6.1.1 recovered to no lesser extent than described in the Application; and
- 2.6.1.2 where not recovered, disposed of while avoiding or reducing any impacts on the environment provided always that this is not done in any way that would have a greater effect on the environment than that described in the Application.
- 2.6.2 The Operator shall maintain the waste recovery or disposal table or description submitted in Section 2.6 of the Application and in particular review the available options for waste recovery and disposal for the purposes of complying with condition 2.6.1 above.
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.
- 2.6.4 No condition applies.

2.7 Energy Efficiency

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.
- 2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Environment Agency's Energy Efficiency Horizontal Guidance Note as from time to time amended. Energy efficiency shall be secured in particular by:
 - ensuring that the appropriate operating and maintenance systems are in place;
 - ensuring that all plant is adequately insulated to minimise energy loss or gain;
 - ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
 - employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge
 of heated water or air;
 - where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Note H2;
 and
 - maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are
 applicable to the activities and their associated environmental benefit and prioritises them, having regard to
 the appraisal method in the Environment Agency's Energy Efficiency Horizontal Guidance Note H2.

2.8 Accident prevention and control

2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in Section 2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

2.9 Noise and Vibration

- 2.9.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:
 - equipment maintenance, eg. of fans, pumps, motors, conveyors and mobile plant;
 - use and maintenance of appropriate attenuation, e.g. silencers, barriers, enclosures;
 - timing and location of noisy activities and vehicle movements:
 - periodic checking of noise emissions, either qualitatively or quantitatively; and
 - maintenance of building fabric,
 - provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.
- 2.9.2 No condition applies.
- 2.9.3 No condition applies.

2.10 On-site Monitoring

- 2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 and 2.2.8, unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of operating conditions.
- 2.10.2 No condition applies.
- 2.10.3 No condition applies.
- 2.10.4 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.
- 2.10.5 The Operator shall notify the Environment Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Environment Agency.
- 2.10.6 The Operator shall maintain records of all monitoring taken or carried out (this includes 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.
- 2.10.7 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing.
- 2.10.8 There shall be provided:
- 2.10.8.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and
- 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Environment Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, unless otherwise agreed in writing by the Environment Agency.
- 2.10.10 No condition applies.

2.11 Closure and Decommissioning

- 2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:-
- 2.11.1.1 attention to the design of new plant or equipment;
- 2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and

- 2.11.1.3 the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.
- 2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.
- 2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.
- 2.11.4 The Operator shall give at least 30 days written notice to the Environment Agency before implementing the site closure plan.

2.12 Multiple Operator installations

2.12.1 This is not a multi-Operator installation

2.13 Transfer to effluent treatment plant

- 2.13.1 No transfer to effluent treatment plant are controlled under this part of this Permit.
- 2.13.2 No condition applies.

3. Records

- 3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-
- 3.1.1 be made available for inspection by the Environment Agency at any reasonable time;
- 3.1.2 be supplied to the Environment Agency on demand and without charge;
- 3.1.3 be legible;
- 3.1.4 be made as soon as reasonably practicable;
- 3.1.5 indicate any amendments which have been made and shall include the original record wherever possible;
- 3.1.6 be retained at the Permitted Installation, or other location agreed by the Environment Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and
- 3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Environment Agency in writing, until all parts of the Permit have been surrendered.

4. Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Environment Agency using the contact details notified in writing to the Operator by the Environment Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:-
- 4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;
- 4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
- 4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and
- 4.1.2.4 to the Environment Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Environment Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Environment Agency, and a summary report on this review shall be sent to the Environment Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Environment Agency, submit to the Environment Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.
- 4.1.7 The Operator shall implement and maintain the Site Protection and Monitoring Programme (SPMP) submitted under this condition, and shall carry out regular reviews of it at a minimum frequency of every 2 years. The results of reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change. Revisions to the SPMP shall follow the appropriate template format given in the Land Protection Guidance documents.
- 4.1.8 No condition applies.

5. Notifications

5.1.1 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.
- 5.1.2 Any information provided under condition 5.1.1 (a)(i) or 5.1.1 (b)(i) shall be confirmed by sending the information listed in schedule 1 to this permit within the time period specified in that schedule.
- 5.1.3 The Operator shall give written notification as soon as practicable prior to any of the following:-
- 5.1.3.1 permanent cessation of the operation of part or all of the Permitted Installation;
- 5.1.3.2 cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
- 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2.
- 5.1.4 The Operator shall notify the Environment Agency, as soon as reasonably practicable, of any information concerning the state of the Site which adds to that provided to the Environment Agency as part of the Application or to that in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit.
- 5.1.5 The Operator shall notify the following matters to the Environment Agency in writing within 14 days of their occurrence:-
- 5.1.5.1 where the Operator is a registered company:-
 - any change in the Operator's trading name, registered name or registered office address;
 - any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
 - any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;
- 5.1.5.2 where the Operator is a corporate body other than a registered company:
 - any change in the Operator's name or address;
 - any steps taken with a view to the dissolution of the Operator.
- 5.1.5.3 In any other case: -
 - the death of any of the named Operators (where the Operator consists of more than one named individual);
 - any change in the Operator's name(s) or address(es);
 - 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 them being in a partnership, dissolving the partnership;
- 5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Environment Agency within one month of:-
- 5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.
- 5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.
- 5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.
- 5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-
- 5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.
- 5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.
- 5.1.8 The Operator shall notify the Environment Agency in writing, of any known or planned introduction or material emission from the permitted installation to sewer, that may increase the concentration of any "dangerous substance", as defined in List I and List II of the Dangerous Substances Directive, 76/464/EEC, and its daughter directives.

6. Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:-

"Application" means the application for the original permit NP333BH, and any subsequent variations and transfer applications, together with any response to notices served under section 4 to the PPC regulations, and any subsequent regulation amendments and any operational change agreed under the conditions of this permit."

"background concentration" means such concentration of that substance as is present in:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation on to the site.
- "BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned". In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.
- "Fugitive emission" means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.8 or 2.2.2.9 of this Permit.
- "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.
- "Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions
- "Land Protection Guidance" means the version of the Agency guidance note "H7 Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme", including its appended templates for data reporting, which is current at the time of issue of the Permit.
- "MCERTS" means the Environment Agency's Monitoring Certification Scheme.
- "Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.
- "Permitted Installation" means the activities and the limits to those activities described in Table 1.1.1 of this Permit.
- "PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit.

[&]quot;Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Staff" includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Year" means calendar year ending 31 December.

- 6.1.2 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.
- 6.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means:-
- 6.1.3.1 in relation to gases 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
- 6.1.3.2 in relation to gases 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
- 6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

Schedule 1 - Notification of abnormal emissions

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

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 PPC Regulations.

Part A

Permit Number

Name of operator	
Location of Facility	
Time and date of the detection	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is 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 t	he breach of a limit

To be notified within 24 hours of detection unless otherwise specified below

Parameter(s)

Limit

Emission point reference/ source

Measured value and uncertainty

Date and time of monitoring

(b) Notification requirements for th	e breach of a limi	t	
To be notified within 24 hours of de	etection unless of	herwise specified	below
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification follow	ving detection of a	a breach of a limit	
Parameter			Notification period
(c) Notification requirements for the	e detection of any	/ significant adver	se environmental effect
To be notified within 24 hours of de	etection		
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 submitte		as practica	ble
Any more accurate information on the notification under Part A.	matters for		
Measures taken, or intended to be tal a recurrence of the incident	ken, to prevent		
Measures taken, or intended to be tallimit or prevent any pollution of the enwhich has been or may be caused by	vironment		
The dates of any unauthorised emiss facility in the preceding 24 months.	ions from the		
Name*			
Post			
Signature			
Date			

^{*} authorised to sign on behalf of the operator

Schedule 2 - Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

Table S2: Reporting of monitoring data			
Parameter	Emission point	Reporting period	Period begins
NOx	A1	Annually	1 st Jan 2008
HF gaseous	A1	Annually	1 st Jan 2008
Particulates	A4, A7, A8, A9, A10, A14, A15, A16	Annually	1 st Jan 2008
Class B VOC's	A4, A5, A7, A8	Annually	1 st Jan 2008
VOC's	'Solvent wipes'	Annually	1 st Jan 2008
Cadmium	S1	Annually	1 st Jan 2008
Mercury	S1	Annually	1 st Jan 2008
Cadmium	Foul Sewer	Annually	1 st Jan 2008
Mercury	Foul Sewer	Annually	1 st Jan 2008
Water Usage		Annually	1 st Jan 2008
Energy Usage		Annually	1 st Jan 2008
Waste Return		Annually	1 st Jan 2008

Schedule 3 - Forms to be used

Table S3 Reporting Forms			
Media / parameter	Form Number	Date of Form	
Water Usage	WU1	As issued for variation notice QP3339XQ Note 1	
Energy Usage	E1	As issued for variation notice QP3339XQ Note 1	
Waste Return	W1	As issued for variation notice QP3339XQ Note 1	
Air	A1	2016	
Sewer	S1	As issued for variation notice QP3339XQ Note 1	
Performance Indicators	PI1	As issued for variation notice QP3339XQ Note 1	

Note 1 Reporting Forms as issued with Variation Notice QP3339XQ (EPR/NP333BH/V003) , or amended and re-issued by the Environment Agency.

Schedule 4 - Reporting of performance data

Data required to be recorded and reported by Condition 4.1.3. The data should be assessed at the frequency given and reported annually to the Agency.

Table S4.1: Annual Production/Treatment	
Super Plastic Formed Titanium	Number of Components
Hot Formed Titanium	Number of Components
Sum of Super Plastic and Hot Formed Components	Number of Components
Chemical Machined Titanium	Number of Components

Table S4.2: Performance parameters			
Parameter	Performance	Frequency of assessment	Performance indicator
Class B VOC's		Annual	kg of solvent emitted / No of Formed Components
VOC's - Solvent Wipes		Annual	kg of solvent emitted / No of Components
NOx		Annual	kg of NOx emitted / No of Components Chemically Machined
HF		Annual	kg of HF emitted / No of Components Chemically Machined
Potable water use		Annual	m³ of water / No of Components Chemically Machined
Energy Usage		Annual	MWh / No of Superplastic Formed Components
		Annual	MWh / No of Hot Formed Components

Table S4.3: Periodic Substance Reports			
Parameter Units Units	Medium	Frequency of assessment	Mass released in the Reporting Period
VOC's - used in solvent impregnated wipes kg	Air	Annual	
Cadmium g	Sewer	Annual	
Mercury g	Sewer	Annual	

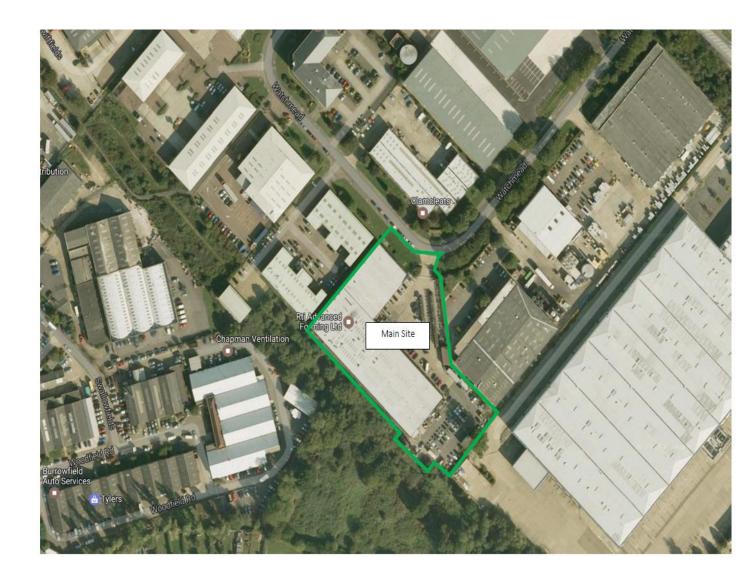
Table S4.4: Reporting periods for Table S4.3	
From	То
1 January	31 December

Name*	
Post	
Signature	
Date	

^{*} Authorised to sign on behalf of operator

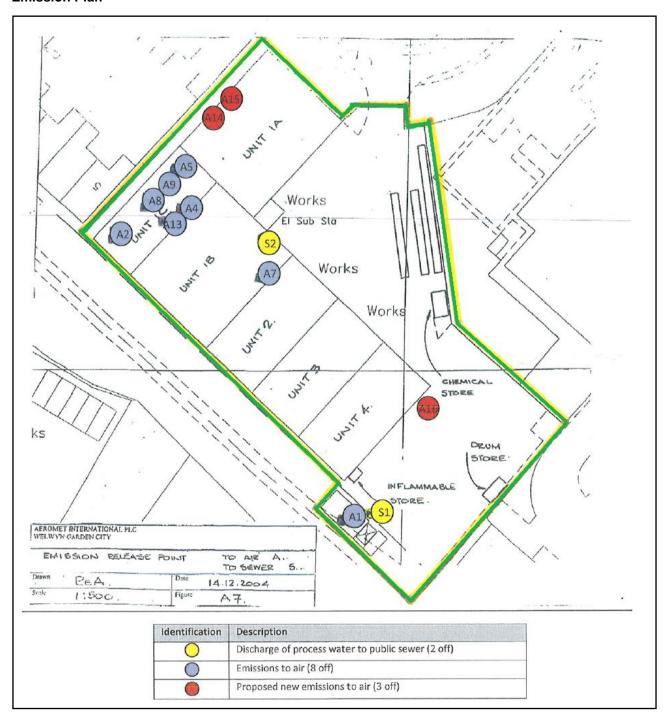
Schedule 5 – Site plan

Site Plan



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Emission Plan



END OF PERMIT