



Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Abercynon Inorganics

AB Connectors Limited

**Ynysboeth Trading Estate
Abercynon
Mountain Ash
Rhondda Cynon Taf
CF45 4SF**

Permit number

BV7443IP

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No.1973), as amended, ("the PPC Regulations") to operate an installation carrying out activities covered by the description in Section 4.2 A (1) f) in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by the Permit:

- Section 4.2 A(1) (f): "Unless falling within another Section of this Schedule, any manufacturing activity involving the use of mercury or cadmium or any compound of either element or which may result in the release into air of either of those elements or their compounds"
- Section 7 Part B - " Surface cleaning activity using a halogenated solvent carrying the risk phrase R40 above the solvent consumption threshold of 1 tonne/year for degreasing of machined components.
- Section 2.3 Part B (a) Surface treatment of metal likely to result in the release into air of any acid-forming oxide of nitrogen by use of nitric acid for pre-treatment

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the Permitted Installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

In some sections of the Permit conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the Permitted Installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance and other relevant guidance.

A non-technical description of the Permitted Installation is given in the Application, but the main features of the Permitted Installation are as follows.

AB Connectors Limited premises are located on a trading estate in Ynysboeth, to the northwest of Abercynon. The Company carry out a range of manufacturing activities on the premises including that for aerospace and military applications. This Permit only regulates electroplating and directly associated activities carried out within the boundary of the Installation. The plating plant was installed in 2000 and occupies 650 m² of the 1.62 hectare site. The principal activity prescribed under the PPC Regulations is electroplating with cadmium to give a corrosion preventative surface. This Permit is based on the Application which comprised all activities in the plating shop including gold, silver, tin, copper, nickel and zinc/cobalt plating.

To the north and east of the site is a railway line, and then the River Cynon. The river is situated 20 m below the surface level of the site. Residential properties of Abercynon are situated along the western and southern perimeter of the site, 100 m from the PPC installation. Beyond the river, to the north and east of the site are high hills used by the Forestry Commission and the high ground moor used for sheep grazing. There are no Sites of Special Scientific Interest located within 2 km of the installation, but Aberbargoed Grasslands Special Area of Conservation is located approximately 9 km to the south west of the installation. Evidence indicates that it will not be impacted as a result of the operations taking place at the Installation.

Aluminium and brass components are produced outside the Installation normally in the machine shop and transferred to the plating shop. After electroplating the components are returned for use as electrical connectors in the production process. The electroplating process can be divided into three main stages; pre-treatment; the cadmium plating process; and post-treatment.

Pre-treatment of component surfaces to be plated may include solventdegreasing, alkaline cleaning, pickling, acid etching and de-smutting. Zinc or nickel coats may be applied to facilitate subsequent electroplating. Plating is undertaken by electrolytic deposition in dedicated plating baths normally containing salt solutions, sodium cyanide, sodium hydroxide and possibly metal brighteners. Post-treatment includes passivation of the plated surface to stabilise the deposited coating by immersing the plated components in a sodium dichromate solution.

Local extract ventilation is provided over process tanks where required for health and safety reasons. These release to air unabated through three external stacks. Emissions of metals and chemicals are insignificant. However particulate matter is also released and the Operator is required to undertake monitoring. The acid pickling line also has extraction and is released to air after abatement in a scrubber to remove acid compounds of nitrogen. The Operator is required to monitor this emission for oxides of nitrogen and particulate matter. Release of oxides of nitrogen is also insignificant after abatement.

All rinse waters and some waste process solutions are directed to an on-site effluent treatment plant. The discharges to sewer and eventually to controlled waters have been assessed as insignificant after treatment on site. Monitoring requirements have been imposed. There are no releases to surface waters from the site other than uncontaminated water runoff as a result of rainwater flowing from the site.

Spent acids, process chemicals and passivates that cannot be treated through the effluent treatment plant are removed from site by waste disposal contractors. Sludge from the effluent treatment plant is also disposed of in this manner.

The operator is presently developing an Environmental Management System to the requirements of BS EN ISO14001. Energy use is directed via participation under a Climate Change Agreement. Energy used for process use is principally electricity from the public supply together with a smaller use of natural gas.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation

Permit holder	Permit Number	Date of Issue
Not applicable	Not applicable	Not applicable

Superseded Licences/Authorisations/Consents relating to this installation

Holder	Regulatory Regime	Reference Number	Date of Issue
AB Connectors Limited	IPC Authorisation	AP4998	May 1995

Other activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit referred to in the Table above. These activities include:

Other existing Licences/Authorisations/Registrations relating to this site

Holder	Reference Number	Date of issue
Not applicable		

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the Permitted Installation or will not comply with the conditions of the transferred Permit. If, however, the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under Condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Status Log

Detail	Date	Response date
Application Duly Made	11/04/2005	
Request for Further Information	06/06/2005	13/06/2005 and 22/09/2005
Request to extend determination	26/10/2005	02/11/2005
Permit determined	09/01/2006	

End of Introductory Note.

Permit
Pollution Prevention and Control
Regulations 2000 No.1973



**ENVIRONMENT
AGENCY**

Permit

Permit number

BV7443IP

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations (SI 2000 No 1973), hereby authorises **AB Connectors Limited ("the Operator")**,

whose Registered Office (or principal place of business) is
Abercynon, Mountain Ash, Rhondda Cynon Taff

Company registration number 1914199

to operate an installation at

**Abercynon Inorganics
Ynysboeth Trading Estate
Abercynon
Mountain Ash
Rhondda Cynon Taf
CF45 4SF**

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

Signed

Date

	<i>9th January 2006</i>
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Mr Phil Reynolds
Regulatory Team Leader (PIR Permitting)
Strategic Permitting Group - Nottingham
Authorised to sign on behalf of the Agency

Conditions

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.

Table 1.1.1 Permitted activities		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Section 4.2 A(1)(f) manufacturing activity involving the use of cadmium or any compound of cadmium	Electroplating of aluminium or brass components using cadmium.	From receipt of material at the process tanks to delivery to another activity
Section 7 Part B - " Surface cleaning activity using tetrachloroethylene above the solvent consumption threshold of 1 tonne/year.	Degreasing of machined components using tetrachloroethylene.	From receipt of material at the process tanks to delivery to another activity
Section 2.3 Part B (a) Surface treatment of metal likely to result in the release into air of any acid-forming oxide of nitrogen	Use of nitric acid for pre-treatment	From receipt of material at the process tanks to delivery to another activity
Directly associated activity: raw materials receipt and storage	Storage, including solid materials and liquid chemicals in tanks, drums and other containers.	From receipt of material in the Installation to delivery to another activity
Directly associated activity: surface treatment of components other than cadmium plating	Pre-treatment, plating and post-treatment of components	From receipt of material at the process tanks to delivery to another activity
Directly associated activity: abatement of releases to air and to sewer	Air emission scrubber and effluent treatment plant	From release of gas and effluent from the process to release from scrubber and effluent treatment plant.
Directly associated activity: product and waste storage and despatch	Storage of solid and liquid products in storage tanks and other containers.	From receipt from another activity to despatch from the Installation

1.2 Site

1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land marked in green 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 Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme

Reference	Requirement	Date
IC1	The Operator shall submit a written report to the Agency which details proposed measures for provision of protection of surface water drainage from fugitive emissions throughout the installation to include improvements of storage, bunding and surfacing. The report shall reference the requirements in Section 2.2.5 of the Agency Sector Guidance Note IPPC S2.07: Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (version 1 September 2004). The report shall include proposed improvements and a timetable for implementation for subsequent approval by the Agency.	31/03/2006
IC2	The Operator shall complete the development and implementation of a formalised Environmental Management System, having regard for the requirements in Section 2.3 of the Agency Sector Guidance Note IPPC S2.07: Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (version 1 September 2004). The Operator shall provide a written report to the Environment Agency on progress towards obtaining full ISO 14001 certification for the Environmental Management System as detailed in the Application.	30/04/2006
IC3	The Operator shall develop a written accident management plan having regard to the requirements set out in Section 2.8 of the Agency sector guidance note IPPC S2.07: Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (version 1 September 2004). A written report shall be submitted to the Agency which shall include a summary of the Plan.	31/05/2006
IC4	The Operator shall investigate options for eliminating or reducing the consumption of solvents for degreasing. A written report shall be submitted to the Agency proposing improvements and a timetable for implementation for subsequent approval by the Agency.	30/06/2006
IC5	The Operator shall review the monitoring methods used on site for demonstrating compliance with limits in Tables 2.2.2 and 2.2.8 and the provision of MCERTS accreditation for the monitoring equipment, personnel and organisations employed for the emissions monitoring program in condition 2.10. The reviews shall identify Best Available Techniques (BAT) with reference to the Agency's Technical Guidance Documents (Monitoring): <ul style="list-style-type: none"> • M1 Sampling Requirements for Monitoring Stack Emissions to Air from Industrial Installations (version 2: July 2002); • M2 Monitoring of Stack Emissions to Air (version 3: October 2004); and • M18 Monitoring of Discharges to Water and Sewer (version 1: July 2004). The Operator shall submit a written report to the Agency summarising the conclusions of the reviews. The report shall also propose a timetable for achieving MCERTS accreditation for subsequent agreement by the Agency.	30/09/2006
IC6	The Operator shall investigate options to reduce the emission to air of particulate matter such that they are no longer "significant" for the purposes of the Agency Horizontal Guidance Note IPPC H1: Environmental Assessment and BAT (version 6 July 2003). A written report shall be submitted to the Agency proposing improvements and a timetable for implementation for subsequent approval by the Agency.	31/12/2006
IC7	The Operator shall assess the performance of the effluent treatment plant against the benchmarks set out in Section 3.2.2 of the Agency Sector Guidance Note IPPC S2.07: Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (version 1 September 2004). A written report on the assessment shall be submitted to the Agency.	31/01/2007
IC8	The Operator shall develop a written Site Closure Plan having regard to the requirements set out in Section 2.11 of the Agency Sector Guidance Note IPPC S2.07: Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (version 1 September 2004). A written report shall be submitted to the Agency including a summary of the Plan.	31/03/2007

Table 1.4.1: Improvement programme

IC9	The Operator shall undertake an assessment of available methods to eliminate emissions of cadmium to sewer and to waste, having regard to the requirements set out in Section 2.1.8 of the Agency technical guidance note IPPC S2.07: Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (version 1 September 2004). The Operator shall submit the review in writing to the Agency, along with proposals for improvement and timescales for implementation for subsequent approval by the Agency.	30/06/2007
IC10	The Operator shall submit a written report to the Agency confirming that the requirements of the Solvent Emissions (England and Wales) Regulations 2004 have been fully met.	31/10/2007

- 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 Agency within 14 days of such date.

1.5 Minor operational changes

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the 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 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 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 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 There are no pre-operational conditions.

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 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	The response to questions 2.1 and 2.2 given Sections B2.1 and B2.2 of the application Supporting Documents.	11 th April 2005
Further information	Response to request for further information	Responses received 13/06/2005 & 22/09/2005

- 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 sources specified in that Table.

Table 2.2.1 : Emission points to air

Emission point reference or description	Source	Location of emission point
A1 (extraction system A)	Southern process tanks in gold/silver and nickel/zinc automatic lines	As shown on plan in Schedule 5
A2 (extraction system B)	Northern process tanks in gold/silver and nickel/zinc automatic lines	As shown on plan in Schedule 5
A3 (extraction system C)	Manual Lines	As shown on plan in Schedule 5
A4 (extraction system D)	All nitric acid process tanks	Scrubber at rear of plating shop as shown on plan in Schedule 5

- 2.2.1.3 The limits for emissions to air for the parameters and emission points set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including reference period) ¹	Monitoring frequency	Monitoring method
A1	Particulates	2 mg/m ³	Annual	BS EN 13284-1
A2	Particulates	10 mg/m ³	Annual	BS EN 13284-1
A3	Particulates	2 mg/m ³	Annual	BS EN 13284-1
A4	Oxides of nitrogen (as NO ₂)	1.5 mg/m ³	Annual	ISO 10849
A4	Particulates	2 mg/m ³	Annual	BS EN 13284-1

Note 1: See Section 6 for reference conditions

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 Emissions to water from the emission point specified in Table 2.2.4 shall only arise from the source specified in that Table. There are no specific controls imposed on emissions to water in Part 2.2.2 of this Permit.

Table 2.2.4: Emission point to water

Emission point reference or description	Source	Receiving water
W1 as on plan in Schedule 5	Uncontaminated surface water	River Cynon

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 sources specified in that Table.

Table 2.2.7 Emission points to sewer

Emission point reference or description	Source	Sewer
S1 as on plan in Schedule 5	Effluent treatment plant	Dwr Cymru

- 2.2.2.8 The limits for the emissions to sewer for the parameters and emission points 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 or Parameter	Limit (including reference period) ¹	Monitoring frequency	Monitoring method
S1	Cadmium	0.05 mg/l	Quarterly	BS 6068-2.21:1995
S1	Free Cyanide	1.0 mg/l	Quarterly	BS 6068-2.75:2002
S1	Chromium VI	0.1 mg/l	Quarterly	BS 6068-2.47:1995
S1	Chromium total	2 mg/l	Quarterly	BS 6068-2.38:1997
S1	Copper	2 mg/l	Quarterly	BS 6068-2.60:1998
S1	Nickel	2 mg/l	Quarterly	BS 6068-2.60:1998
S1	Zinc	2 mg/l	Quarterly	BS 6068-2.60:1998

Note 1: See Section 6 for reference conditions

2.2.2.9 No condition applies.

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 – grammes
Total cadmium	150

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 (S.I. 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

2.2.4.1 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.

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.

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
Solvent consumption ¹	The annual solvent consumption shall not exceed 3 tonnes per year.
Alkalinity of scrubber liquor	Alkalinity of scrubber shall be maintained pH > 10.5 measured and recorded continuously
Cadmium concentration in transfer from T13 to T10	The cadmium concentration in tank T13 shall be less than 10 •g/l prior to any transfer being made to tank 10 measured and recorded before each transfer.
Chrome reduction tank pH	Acidity in the chrome reduction tank T1 shall be maintained at pH < 3.0, measured continuously and recorded on each day of operation.
Chrome reduction tank Redox Potential	The Redox Potential in the chrome reduction tank T1 shall be maintained at > 150 mV, measured continuously and recorded on each day of operation.
Cyanide destruction tank pH	Alkalinity in the cyanide destruction tank T2 shall be maintained at pH > 10.5, measured continuously and recorded on each day of operation.
Cyanide destruction tank Redox Potential	The Redox Potential in the cyanide destruction tank T2 shall be maintained at > 300 mV, measured continuously and recorded on each day of operation.
Settlement tank pH	Alkalinity in the settlement tank T5 shall be maintained at 9 < pH < 11, measured continuously and recorded on each day of operation.
Note ¹	See condition 6.1.1 for definition

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 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. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the 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 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.

2.7 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 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 Permitted 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 Agency's Energy Efficiency Horizontal Guidance Note H2.

2.8 Accident prevention and control

2.8.1 The Operator shall produce an accident management plan as required under Condition 1.4 Improvement Programme and maintain and implement it where necessary. 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, eg. 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.

2.10 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, 2.2.8 and 2.2.11 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.

2.10.3 No condition applies.

2.10.4 No condition applies.

2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the 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 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 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 Permitted 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 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 transfers to effluent treatment plant are controlled under this part of this Permit.

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 Agency at any reasonable time;
 - 3.1.2 be supplied to the 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 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 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 Agency using the contact details notified in writing to the Operator by the 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 Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the 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 Agency, and a summary report on this review shall be sent to the 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 Agency, submit to the 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, within two months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance. 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 such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.

5 Notifications

- 5.1.1 The Operator shall notify the Agency **without delay** of:-
- 5.1.1.1 the detection of an emission of any substance, which exceeds any limit or criterion in this Permit, specified in relation to the substance;
 - 5.1.1.2 the detection of any fugitive emission, which has caused, is causing or may cause significant pollution;
 - 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution; and
 - 5.1.1.4 any accident, which has caused, is causing or has the potential to cause significant pollution.
- 5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:-
- 5.1.2.1 the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
 - 5.1.2.2 the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;
- and such information shall be in accordance with 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 Agency, as soon as reasonably practicable, of any information concerning the state of the Site which adds to that provided to the 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 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);

Notifications

- 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 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 Agency in writing, of any known or planned introduction or material emission from the permitted installation to water or 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.
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6 Interpretation

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

"Application" means the application for this Permit, including responses to requests for further information received on 13/06/2005 and 22/09/2005, 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, 2.2.2.4, 2.2.2.5, 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.

"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.

"Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

Interpretation

"*Solvent consumption*" means the total input of organic solvents into the Installation less any volatile organic compounds that are recovered for reuse.

"*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.

"*Annual*" for reporting/sampling means after/during each year and, when sampling, with at least 4 months between each sampling date.

"*m³*" means cubic metre.

"*l*" means litre

"*mg/m³*" means milligramme per cubic metre.

"*mg/l*" means milligramme per litre.

"*µg/l*" means microgramme per litre

"*g*" means gramme

"*kg*" means kilogramme.

"*t*" means tonne.

"*MWh*" means megawatt hour.

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	BV7443IP
Name of Operator	AB Connectors Limited
Installation	Abercynon Inorganics
Location of the emission	
Time and date of the emission	

Substance(s) emitted	Media	Best estimate of the quantity or the rate of emission	Time during which the emission took place

Measures taken, or intended to be taken, to stop the emission	
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Part B

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 or harm which has been or may be caused by the emission	
The dates of any unauthorised emissions from the Permitted Installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of **AB Connectors Limited**

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
Particulates	A1, A2, A3 and A4	Annually	01/01/2006
Oxides of Nitrogen	A4	Annually	01/01/2006
Scrubber liquor pH	A4	Annually	01/01/2006
Cadmium concentration	S1	6 monthly	01/01/2006
Free Cyanide	S1	6 monthly	01/01/2006
Chromium VI	S1	6 monthly	01/01/2006
Chromium total	S1	6 monthly	01/01/2006
Copper	S1	6 monthly	01/01/2006
Nickel	S1	6 monthly	01/01/2006
Zinc	S1	6 monthly	01/01/2006
Cadmium load	S1	6 monthly	01/01/2006
Cadmium concentration	Tank T13	6 monthly	01/01/2006
Chrome reduction tank pH	Tank T1	6 monthly	01/01/2006
Chrome reduction tank Redox Potential	Tank T1	6 monthly	01/01/2006
Cyanide destruction tank pH	Tank T2	6 monthly	01/01/2006
Cyanide destruction tank Redox Potential	Tank T2	6 monthly	01/01/2006
Settlement tank pH	Tank T5	6 monthly	01/01/2006
Solvent consumption	Installation	Annually	01/01/2006
Energy usage	Installation	Annually	01/01/2006
Waste disposal and/or recovery.	Installation	Annually	01/01/2006
Water usage	Installation	Annually	01/01/2006

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media / parameter	Form number	Date of form
Air	A1	01/2006
Sewer	S1	01/2006
Waste Return	R1	01/2006
Water usage	WU1	01/2006
Energy	E1	01/2006
Performance indicators	PI1	01/2006

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

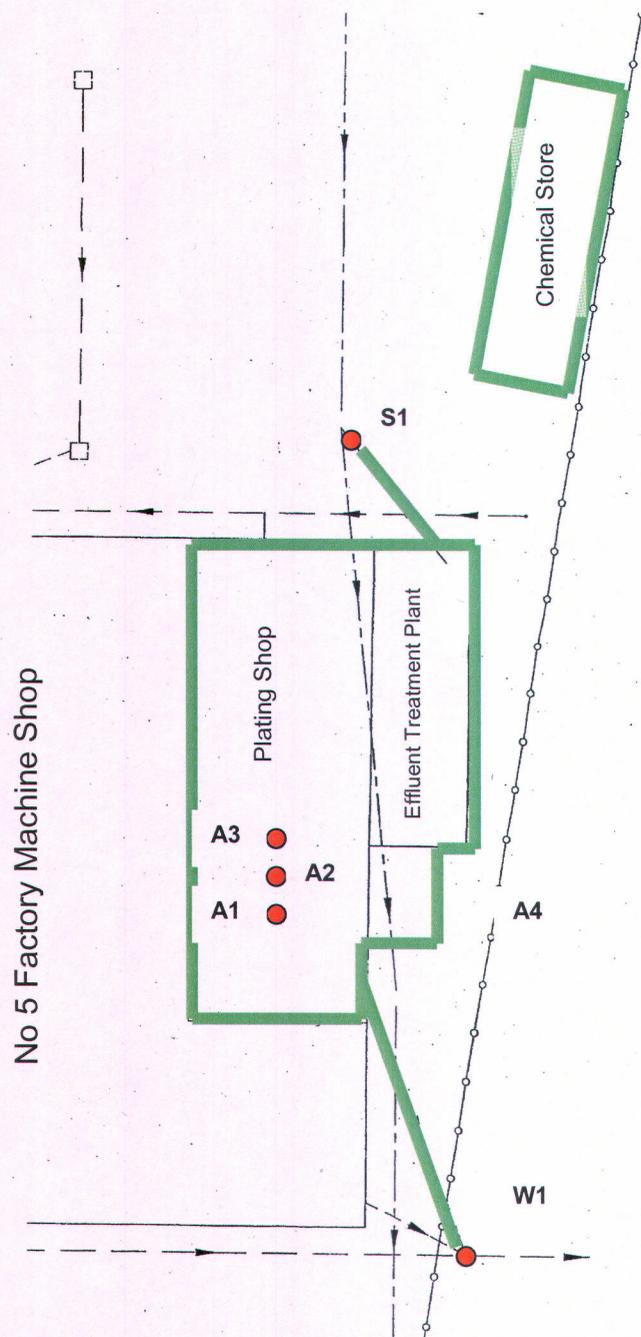
Cadmium Use	Kg
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Table S4.2: Performance parameters

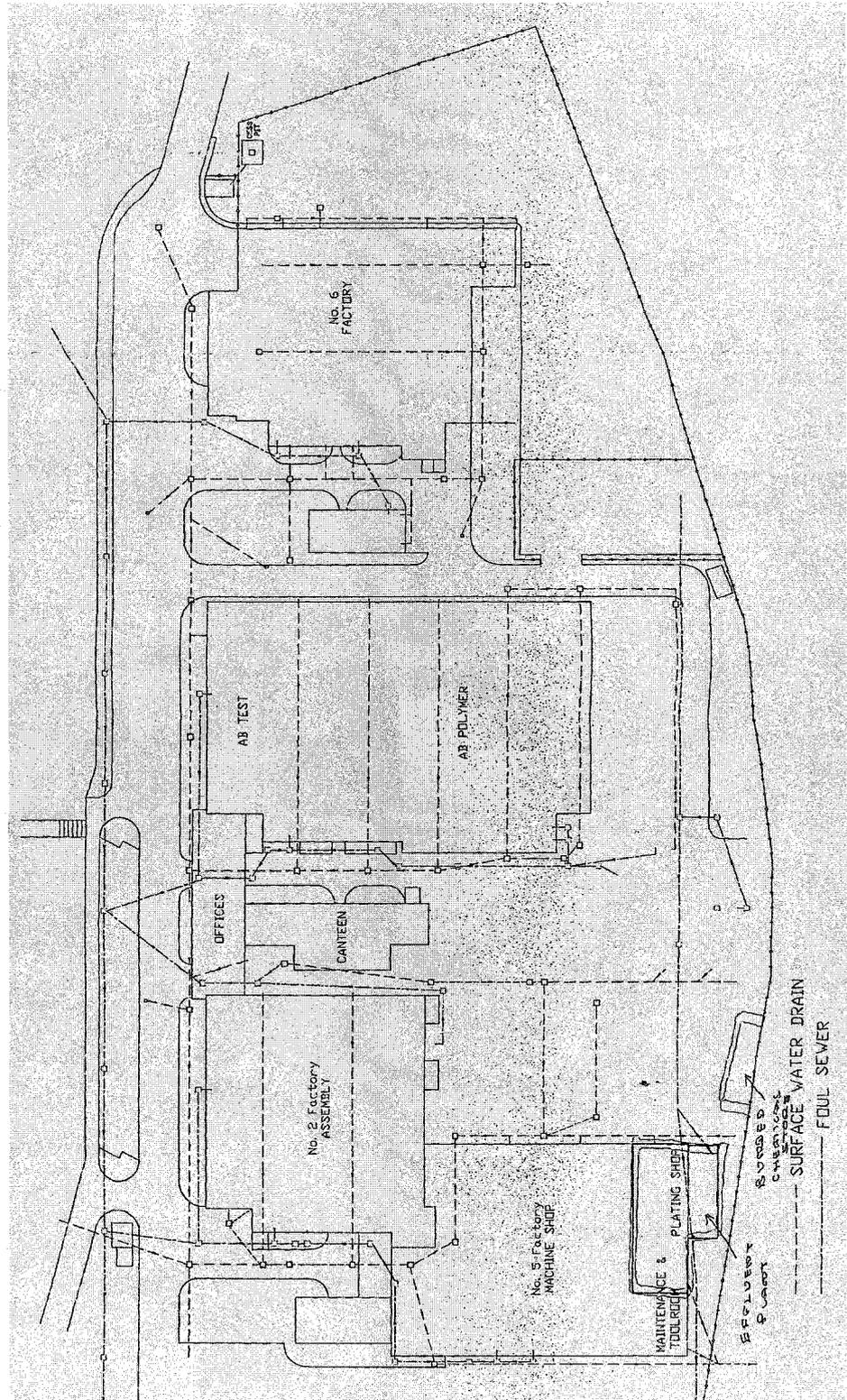
Parameter	Frequency of assessment	Performance indicator
Energy use: <ul style="list-style-type: none"> • per kg cadmium used • delivered electricity 	Annual	MWh/kg cadmium MWh
Non-hazardous waste disposal	Annual	kg/ kg cadmium
Hazardous waste disposal	Annual	kg/ kg cadmium
Hazardous waste recovery	Annual	kg/ kg cadmium
Potable water use	Annual	m ³ / kg cadmium
Specific Effluent Discharge	Annual	m ³ / kg cadmium

Schedule 5 - Site plan

Plan showing extent of Permitted Installation



Plan showing location of Installation within premises.



END OF PERMIT