



Headquarters  
P.O. Box 3000  
Johnstown Castle Estate  
County Wexford  
Ireland

INTEGRATED POLLUTION PREVENTION & CONTROL LICENCE  
**Recommended Determination**

<b>Licence Register Number:</b>	<b>P0269-02</b>
<b>Company Register Number:</b>	<b>280319</b>
<b>Licensee:</b>	<b>Basta Parsons Limited</b>
<b>Location of Installation:</b>	<b>Tubbercurry, County Sligo</b>

<b>CRO Number</b>	<b>Company Register Number</b>
<b>Daily</b>	During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
<b>Day</b>	Any 24 hour period.
<b>Daytime</b>	0800 hrs to 2200 hrs.
<b>dB(A)</b>	Decibels (A weighted).
<b>DO</b>	Dissolved oxygen.
<b>Documentation</b>	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>Emission limits</b>	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence.
<b>EMP</b>	Environmental Management Programme.
<b>Environmental damage</b>	As defined in Directive 2004/35/EC.
<b>EPA</b>	Environmental Protection Agency.
<b>European Waste Catalogue (EWC)</b>	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
<b>Facility</b>	Any site or premises used for the purpose of the recovery of disposal or waste.
<b>Fortnightly</b>	A minimum of 24 times per year, at approximately two week intervals.
<b>GC/MS</b>	Gas chromatography/mass spectroscopy.
<b>ha</b>	Hectare.
<b>Heavy metals</b>	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.

<b>Monthly</b>	A minimum of 12 times per year, at intervals of approximately one month.
<b>Night-time</b>	2200 hrs to 0800 hrs.
<b>Noise-sensitive location (NSL)</b>	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
<b>ppm</b>	Parts per million.
<b>PRTR</b>	Pollutant Release and Transfer Register.
<b>Quarterly</b>	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
<b>Sanitary effluent</b>	Wastewater from installation toilet, washroom and canteen facilities.
<b>SOP</b>	Standard operating procedure.
<b>Specified emissions</b>	Those emissions listed in <i>Schedule B: Emission Limits</i> , of this licence.
<b>Standard method</b>	A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
<b>Storm water</b>	Rain water run-off from roof and non-process areas.
<b>The Agency</b>	Environmental Protection Agency.
<b>TA Luft</b>	Technical Instructions on Air Quality Control – TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBl. I p 721). Federal Ministry for Environment, Bonn 1986, including the amendment for Classification of Organic Substances according to section 3.1.7 TA. Luft, published in July 1997.
<b>TOC</b>	Total organic carbon.
<b>Trade effluent</b>	Trade effluent has the meaning given in the Water Services Act, 2007.

## ***Decision & Reasons for the Decision***

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Acts 1992 to 2012.

In reaching this decision the Environmental Protection Agency has considered the review and supporting documentation received from the licensee, all submissions received from other parties and the report of its inspector.

### ***Part I Schedule of Activities Licensed***

In pursuance of the powers conferred on it by the Environmental Protection Agency Acts 1992 to 2012, the Agency proposes to determine the review of the existing licence (Reg. No. P0269-01) granted to:

**Basta Parsons Limited, Tubbercurry, County Sligo and CRO Number 280319**

under Section 90(2) of the said Acts to carry on the following activity:

: - Electroplating operations

at **Basta Parsons Limited, Tubbercurry, County Sligo** subject to the following twelve Conditions, with the reasons therefor and associated schedules attached thereto.

### ***Part II Schedule of Activities Refused***

None of the proposed activities as set out in the licence application have been refused.

2.1.2 **The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence.**

2.2 Environmental Management System (EMS)

2.2.1 The licensee shall **maintain** an Environmental Management System (EMS). The EMS shall be updated on an annual basis.

2.2.2 The EMS shall include, as a minimum, the following elements:

2.2.2.1 Management and Reporting Structure.

2.2.2.2 Schedule of Environmental Objectives and Targets.

The licensee shall **maintain** a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology, cleaner production and the prevention, reduction and minimisation of waste and shall include waste reduction targets. **The schedule shall also contain a review to achieve a reduction in emission to air to levels specified in the BAT Guidance Note for the Surface Treatment of Metals and Plastic Materials.** The schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

2.2.2.3 Environmental Management Programme (EMP)

The licensee shall **maintain** an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be **maintained** by the licensee. It shall include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.4 Documentation

- (i) The licensee shall **maintain** an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.5 Corrective Action

The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.

2.2.2.6 Awareness and Training

The licensee shall **maintain** procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a

- 3.3 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.4 **In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.**
- 3.5 **The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.**
- 3.6 Tank, Container and Drum Storage Areas
- 3.6.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. **Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).**
- 3.6.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
  - (ii) 25% of the total volume of substance that could be stored within the bunded area.
- 3.6.3 **All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for storm water emissions under Condition 6.14.**
- 3.6.4 **All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.**
- 3.6.5 **All tanks, containers and drums shall be labelled to clearly indicate their contents.**
- 3.7 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. **Once used, the absorbent material shall be disposed of at an appropriate facility.**
- 3.9 All pumps sumps, **storage tanks** or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) from the date of grant of this licence.
- 3.10 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. **This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2. of this licence for the reduction in fugitive emissions.**
- 3.11 **All wellheads shall be adequately protected to prevent contamination or physical damage.**
- 3.12 The licensee shall **maintain** in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.13 Adequate emergency storage facilities shall be provided by the licensee to store untreated effluent in the event of a breakdown of the process effluent treatment system.

**Reason:** *To provide for appropriate operation of the installation to ensure protection of the environment.*

total ammonia and orthophosphate no grab sample shall exceed 2 times the emission limit value.

4.4 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.

4.5 Noise

Noise from the installation shall not give rise to sound pressure levels (Leq, T) measured at NSLs of the installation which exceed the limit value(s).

**Reason:** To clarify the interpretation of limit values fixed under the licence.

## Condition 5. Emissions

5.1 No specified emission from the installation shall exceed the emission limit values set out in *Schedule B: Emission Limits*, of this licence. There shall be no other emissions of environmental significance.

5.2 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.

5.3 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.

5.4 Boilers shall be operated so as to give a smoke colour less than or equal to shade number 1 on the Ringelmann chart except during periods of start up. Such start up periods shall not exceed 30 minutes in any 24 hour period.

5.5 Discharges from the installation shall not artificially increase the ambient temperature of the receiving water by more than 1.5°C outside the mixing zone. **In relation to temperature, the mixing zone shall not exceed 25% of the cross sectional area of the river at any point.**

**Reason:** To provide for the protection of the environment by way of control and limitation of emissions.

## Condition 6. Control and Monitoring

6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring*, of this licence.

6.1.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.

6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.

6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.

6.1.4 Where any analysis is sub-contracted it shall be to a competent laboratory.

6.2 The licensee shall ensure that:

(i) sampling and analysis for all parameters listed in the Schedules to this licence; and

- 6.14.2 The licensee shall, within six months of date of grant of this licence, establish suitable trigger levels for zinc and chlorinated hydrocarbons (CHC) in storm water discharges, such that storm waters exceeding these trigger levels will be diverted for retention and suitable disposal.
- 6.14.3 The licensee shall have in place a response programme to the achievement or exceedance of trigger level values. This response programme shall include actions proposed to ensure there will be no emissions to surface water of environmental significance.
- 6.14.4 In the establishment of trigger levels, the licensee shall have regard to the *Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste Licensed Facilities* published by the Office of Environmental Enforcement and, where necessary, and with the agreement of the Agency, revise these trigger levels.
- 6.15 **Ground Water**
- Within eighteen months of the date of this licence, the licensee shall, in line with the criteria set out in the *Guidance on the Authorisation of Discharges to Groundwater*, published by the Environmental Protection Agency, review the most relevant hydrogeological assessment report for the installation or where relevant, arrange for an assessment of the installation, by an appropriately qualified consultant/professional, to demonstrate compliance with the European Communities Environmental Objectives (Groundwater) Regulations 2010, S.I. No 9 of 2010. A report on the review or assessment report with recommendations shall be included in the next AER. Further to the hydrogeological review or assessment, any actions (including the setting of groundwater compliance values, if appropriate) required to demonstrate compliance with the European Communities Environmental Objectives (Groundwater) Regulations 2010, shall be implemented before 22nd December 2015.
- 6.16 **Noise**
- The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.
- 6.17 **Pollutant Release and Transfer Register (PRTR)**
- The licensee shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER
- 6.18 The licensee shall, within three months from date of grant of licence, carry out an investigation to identify the nature, source and cause of the zinc and chlorinated hydrocarbon contamination at SD1 (storm water emission point). The licensee shall isolate the source, evaluate the environmental pollution and put in place measures to avoid recurrence and appropriate remedial actions. A report on the investigation and all corrective actions taken shall be submitted to the Agency within three months from date of grant of licence.
- 6.19 The licensee shall, not later than six months from the date of grant of licence submit to the Agency for agreement a proposal for the relocation of the final effluent discharge point to the Tubbercurry River. Having regard to the proposal submitted the licensee shall, in agreement with the Agency implement agreed proposal before the 22<sup>nd</sup> December 2015.
- 6.20 The licensee shall review the Pollution Reduction Plan for their river basin district for the reduction of pollution from priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances, established in accordance with Part V of the European Communities Environmental Objectives



- 8.8 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.9 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.

**Reason:** *To provide for the appropriate handling of material and the protection of the environment.*

## **Condition 9. Accident Prevention and Emergency Response**

- 9.1 The licensee shall, **within six months of date of grant of this licence**, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall, **within six months of date of grant of this licence**, ensure that a documented Emergency Response Procedure is in place that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (ii) isolate the source of any such emission;
  - (iii) evaluate the environmental pollution, if any, caused by the incident;
  - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - (v) identify the date, time and place of the incident;
  - (vi) notify the Agency and other relevant authorities.
- 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency, to:
- (i) identify and put in place measures to avoid recurrence of the incident; and
  - (ii) identify and put in place any other appropriate remedial actions.

**Reason:** *To provide for the protection of the environment.*

## **Condition 10. Decommissioning & Residuals Management**

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

- 11.4 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall, as soon as practicable following incident notification, submit to the Agency the incident record.
- 11.5 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.6 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation.
- 11.7 **The licensee shall as a minimum keep the following documents at the site:**
- (i) **the licences relating to the installation;**
  - (ii) **the current EMS for the installation;**
  - (iii) **the previous year's AER for the installation;**
  - (iv) **records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation;**
  - (v) **relevant correspondence with the Agency;**
  - (vi) **up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;**
  - (vii) **up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;**
  - (viii) **any elements of the licence application or EIS documentation referenced in this licence.**
- This documentation shall be available to the Agency for inspection at all reasonable times.
- 11.8 The licensee shall submit to the Agency, by the 31<sup>st</sup> March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D: Annual Environmental Report*, of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.9 **A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:**
- (i) **the tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery;**
  - (ii) **the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);**
  - (iii) **details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;**
  - (iv) **written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;**
  - (v) **details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;**

annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.

12.2.4 The licensee shall revise the cost of closure, **restoration and aftercare** annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.3.

12.2.5 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Residuals Management Plans and Financial Provision when implementing Conditions 12.2.2 and 12.2.3 above.

<p><b><i>Reason:</i></b> <i>To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.</i></p>
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**B.2 Emissions to Water**

**Emission Point Reference No:** SW1  
**Name of Receiving Waters:** Tubbercurry River  
**Location:** Discharge at lowest point of weir  
**Volume to be emitted:** Maximum in any one day: 200 m<sup>3</sup>  
 Maximum in any one hour: 12m<sup>3</sup>

Parameter	Emission Limit Value	
	Emission limit values will apply until the 22 <sup>nd</sup> December 2015 (mg/l)	Emission limit values will apply after the 22 <sup>nd</sup> December 2015 (mg/l)
Temperature	25 °C (max) <sup>Note 1</sup>	
pH	6 - 9	
Toxicity	5 TU	
<b>BOD</b>	20	<b>13</b>
<b>COD</b>	100	100
<b>Suspended Solids</b>	30	30
<b>Fats, Oils and Greases</b>	20	20
<b>Nitrates (as N)</b>	15	15
<b>Ammonia (as N)</b>	10	<b>0.85</b>
<b>Ortho-phosphate (as P)</b>	2	<b>0.45</b>
<b>Cyanide (mg/l)</b>	0.05	0.05
<b>Zinc</b>	0.5	0.5
<b>Nickel</b>	0.5	<b>0.1</b>
<b>Copper</b>	0.5	<b>0.13</b>
<b>Chromium VI</b>	0.1	0.1
<b>Cadmium</b>	0.1	<b>0.005</b>

Note 1: Subject to Condition 5.5 of this licence

## **SCHEDULE C: Control & Monitoring**

### ***C.1.1. Control of Emissions to Air***

Apart from the furnaces there shall be no emissions to air of environmental significance.



### ***C.1.2. Monitoring of Emissions to Air***

Emission Point Reference No's.: A2-1 and A2-2

<b>Parameter</b>	<b>Monitoring Frequency</b>	<b>Analysis Method/Technique</b>
TA Luft Inorganic Dust Class I	Biennially	Isokinetic/Gravimetric and AA/ICP
TA Luft Inorganic Dust Class II	Biennially	Isokinetic/Gravimetric and AA/ICP
TA Luft inorganic Dust Class III	Biennially	Isokinetic/Gravimetric and AA/ICP
General Particulates	Biennially	Isokinetic/Gravimetric



**C.2.2. Monitoring of Emissions to Water**

Emission Point Reference No: SW1

Control Parameter	Monitoring Frequency	Key Equipment/Technique
<b>Flow</b>	Continuous <b>Daily</b> <sup>Note 1</sup>	On-line flow meter with recorder
<b>Temperature</b>	Weekly	temperature probe
<b>pH</b>	Weekly	pH electrode/meter
<b>Chemical Oxygen Demand</b>	Daily <sup>Note 2</sup>	Standard Method
<b>Biochemical Oxygen Demand</b>	<b>Bi-annually</b> <sup>Note 2</sup>	Standard Method
<b>Suspended Solids</b>	<b>Bi-annually</b> <sup>Note 2</sup>	Standard Method
<b>Ammonia (as N)</b>	<b>Bi-annually</b>	Standard Method
<b>Ortho phosphate (as P)</b>	<b>Bi-annually</b> <sup>Note 2</sup>	Standard Method
<b>Phenols</b>	<b>Bi-annually</b>	Standard Method
<b>Cyanide</b>	<b>Daily</b>	Standard Method
<b>Zinc</b>	<b>Weekly</b>	Standard Method
<b>Nickel</b>	<b>Weekly</b>	Standard Method
<b>Copper</b>	<b>Weekly</b>	Standard Method
<b>Chromium VI</b>	<b>Weekly</b>	Standard Method
<b>Cadmium</b>	<b>Bi-annually</b>	Standard Method
<b>Total Chromium</b>	<b>Weekly</b>	Standard Method
<b>Total Heavy Metals</b>	<b>Weekly</b> <sup>Note 2</sup>	Standard Method
<b>Priority Substances</b> <sup>Note 3</sup>	<b>Annually</b>	<b>Standard Method</b>
<b>Oils, fats and greases</b>	<b>Bi-annually</b>	Standard Method
<b>Toxicity</b> <sup>Note 4</sup>	<b>Annually</b> (24 hour flow proportional composite)	To be agreed by the Agency

**Note 1:** Total effluent discharged over the 24 hour period in which the composite sample is collected shall be recorded.

**Note 2:** All samples shall be collected on a 24 hour flow proportional composite sampling basis.

**Note 3:** The relevant priority substances or pollutants for monitoring shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to "Guidance on the Screening for Priority Substances for Waste Water Discharge Licences" issued by the Agency. Monitoring for the identified priority substances or pollutants shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency.

**Note 4:** The number of toxic units (Tu) = 100/x hour EC/LC<sub>50</sub> in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.



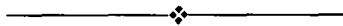
**C.3.1. Control of Emissions to Sewer**

There shall be no process effluent emissions to sewer.



**C.3.2. Monitoring of Emissions to Sewer**

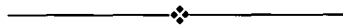
There shall be no monitoring of process effluent emissions to sewer.



**C.4 Waste Monitoring**

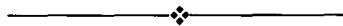
Waste Class	Frequency	Parameter	Method
Metal Sludge's (all types)	Annually	Zinc, Copper, Chromium, Chromium VI, Cadmium, Nickel.	Digestion, Atomic Absorption / ICP
		Cyanide	Standard Methods
Other <sup>Note 1</sup>			

Note 1: Analytical requirements to be determined on a case by case basis.



**C.5 Noise Monitoring**

No additional noise monitoring is required in this schedule.



Review of decommissioning management plan.  
Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).  
Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions.  
Any other items specified by the Agency.

**Note 1:** Content may be revised subject to the agreement of the Agency.

Sign off for Proposed Determinations/Decisions

**Signed on behalf of the said Agency** \_\_\_\_\_  
On the xx day of xxxxx, 200X      xxxxxxxxxxxx      **Authorised Person**