ENVIRONMENT AGENCY

Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Empire Treatment Works

Veolia ES (UK) Limited
Stubbers Green Road
Aldridge
West Midlands
WS9 8BL

Permit number

XP3037SE

Empire Treatment Works
Permit Number XP3037SE

Introductory note

This introductory note does not form a part of the permit

The main features of the installation are as follows. Empire Treatment Works is an Installation operated by Veolia ES (UK) Limited (formally Onyx UK Limited and Veolia ES (Onyx) Limited) at Stubbers Green Road, Aldridge, West Midlands (SK 0430 0230). The site has operated under waste management licences since the 1970's.

The installation is approximately 2km north of Aldridge and is situated adjacent to the Daw End Branch of the Wyrley and Essington Canal. The surrounding area is a mixture of residential, commercial and industrial developments. Extensive clay extraction is ongoing north and south of the installation for brick making, and neighbouring former clay pits have been extensively used for landfilling. Historically coal mining has been undertaken in the area, and underground strata have formerly been used for waste disposal, though this practice has been discontinued.

The nearest residential properties are to the north east and east of the site in Walsall Wood and Leighswood, though occupied houseboats are present in the canal basin to the east of the site. There are four Sites of Special Scientific Interest (SSSIs) within 2km of the installation, Swan Pool and the Swag, Stubbers Green Bog, Jockey Field, and Daw End Railway Cutting.

The main activity carried out at the site is the treatment of hazardous and non-hazardous wastes by neutralisation, settlement and filtration, with the resulting solid waste residue disposed of to landfill and the liquid effluent disposed of to sewer. The site also treats cyanide wastes via oxidation with hypochlorite, prior to submission to the main treatment process. Ancillary operations on the site include associated waste storage, oil/water separation, drum washing, crushing and shedding and a road tanker barrel washout facility.

Other than the emissions to landfill and sewer mentioned above, the main potential emissions from the site are gases arising from waste treatment and fugitive emissions and spillages to ground from waste handling, accidents etc. In addition the Permit contains conditions which control noise, dust or odours that may potentially arise from operation of the site.

Waste is treated in a range of treatment vessels, which are enclosed and vented via chemical scrubbers which remove gases released by the treatment processes.

The site is surfaced with hardstanding and is designed to contain any spillages. Drainage arising from the site is treated through the treatment process prior to discharge to sewer.

The Operator uses a system of written operating procedures to ensure that activities at the site are controlled to prevent pollution. Operations are controlled via an Environmental Management System (EMS) accredited to ISO 14001.

Status Log of the permit		
Detail	**Date**	**Response Date**
Application XP3037SE	Duly made 22/09/2005	
Schedule 4 Notice	22/03/2006	25/04/2006
Schedule 4 Notice	13/04/2006	12/05/2006
Request for information	18/04/2006	27/04/2006
Request for information	05/05/2006	08/05/2006
Request for information	30/08/2006	05/09/2006
Request for information	23/10/2006	26/10/2006, 27/10/2007
Additional information received	26/10/2006	
Permit determined	24/11/2006	

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation			
Holder	**Reference Number**	**Date of Issue**	**Fully or Partially Superseded**
Polymeric Treatments Limited (Waste Management Licence)	SL51 (EAWML 41316)	23/12/83	Partially Superseded
Polymeric Treatments Limited (Waste Management Licence)	SL231 (EAWML 40817)	03/03/78	Partially Superseded
Polymeric Treatments Limited (Waste Management Licence)	SL323 (EAWML 41308)	27/07/83	Partially Superseded

The waste management licences shall cease to have effect if and to the extent that treatment, keeping or disposal of waste authorised by the licence is authorised by this permit.

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	**Reference Number**	**Date of issue**
Polymeric Treatments Limited (Waste Management Licence)	SL51 (EAWML 41316)	23/12/83
Polymeric Treatments Limited (Waste Management Licence)	SL231 (EAWML 40817)	03/03/78
Polymeric Treatments Limited (Waste Management Licence)	SL323 (EAWML 41308)	27/07/83
Onyx UK Limited (Radioactive Substances Act 1993 Certificate of Registration)	BL 0545	July 2001

End of Introductory Note

Permit

Permit number
XP3037SE

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) hereby authorises
Veolia ES (UK) Ltd ("the Operator"),

whose registered office is
Veolia House
154A Pentonville Road
London
N1 9PE

company registration number **2481991**

to operate an installation at
Empire Treatment Works
Stubbers Green Road
Aldridge
West Midlands
WS9 8BL

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

Signed	Date

J M Ingram

Authorised to sign on behalf of the Agency

Conditions

1 Management

1.1 General management

1.1.1 The activities shall be managed and operated:

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

(b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

1.2 Accidents that may cause pollution

1.2.1 The operator shall:

(a) maintain and implement an accident management plan;

(b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;

(c) make any appropriate changes to the plan identified by a review.

1.3 Energy efficiency

1.3.1 The operator shall:

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

(b) review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and

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

1.4 Efficient use of raw materials

1.4.1 The operator shall:

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

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

(c) review and record at least every 4 years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

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

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

1.5.1. The operator shall:

(a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;

(b) review and record at least every 4 years whether changes to those measures should be made; and

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

1.6 Site security

1.6.1. Site security measures shall prevent unauthorised access to the site, as far as practicable.

2. Operations

2.1 Permitted activities

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

2.1.2 Where there are wastes on site that are not subject to this permit then the wastes subject to the activities authorised under condition 2.1.1, shall be clearly identified.

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 2 to this permit.

2.3 Operating techniques

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

2.3.2 No raw materials or fuels listed in schedule 3 table S3.1 shall be used unless they comply with the specifications set out in that table.

2.3.3 Waste shall only be accepted if:

(a) it is of a type and quantity listed in Schedule 3 Table S3.2; and

(b) it conforms to the description in the documentation supplied by the producer and holder.

(c) it is only processed in the activity specified in Table S1.1 of Schedule 1.

2.3.4 Records shall be kept of all waste accepted onto the site.

2.3.5 The Operator shall ensure that where waste produced at the Permitted Installation is sent to a waste recovery or disposal facility, the facility in question is provided with the following information, prior to receipt of the waste:

- The nature of the process producing the waste
- The composition of the waste
- The handling requirements of the waste
- The hazard classification associated with the waste
- The waste code of the waste

2.3.6 The Operator shall ensure that where waste produced at the Permitted Installation is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Off-site conditions

There are no off-site conditions under this section.

2.5 Improvement programme

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

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

2.6 Pre-operational conditions

There are no pre-operational conditions in this permit.

2.7 Closure and decommissioning

2.7.1 The operator shall maintain and operate the activities so as to prevent or where that is not practicable, to minimise, any pollution risk on closure and decommissioning.

2.7.2 The operator shall maintain a site closure plan which demonstrates how the activities can be decommissioned to avoid any pollution risk and return the site to a satisfactory state.

2.7.3 The operator shall carry out and record a review of the site closure plan at least every 4 years.

2.7.4 The site closure plan (or relevant part thereof) shall be implemented on final cessation or decommissioning of the activities or part thereof.

2.8 Site protection and monitoring programme

2.8.1 The operator shall, within 2 months of the issue of this permit, submit a site protection and monitoring programme.

2.8.2 The operator shall implement and maintain the site protection and monitoring programme and shall carry out and record a review of it at least every 4 years.

3. Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 4 tables S4.1, S4.2 and S4.3.

3.1.2 The limits given in schedule 4 shall not be exceeded.

3.2 Transfers off-site

3.2.1 Records of all the wastes sent off site from the activities, for either disposal or recovery, shall be maintained.

3.3 Fugitive emissions of substances

3.3.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including those specified in schedule 1 table S1.4, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.3.2 Litter or mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been used to prevent or where that is not practicable to minimise, the litter and mud.

3.3.3 Litter or mud arising from the activities shall be cleared from affected areas outside the site as soon as practicable.

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

3.4 Odour

3.4.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the odour.

3.5 Noise and vibration

3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the noise and vibration.

3.6 Monitoring

3.6.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake monitoring for the parameters, at the locations and at not less than the frequencies specified in the following tables in schedule 4 to this permit:

(a) point source emissions specified in tables S4.1, S4.2 and S4.3;

(b) process monitoring specified in table S4.4.

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

3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Agency.

3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 4 tables S4.1, S4.2 and S4.3 unless otherwise specified in that schedule.

3.6.5 Within 6 months of the issue of this permit (unless otherwise agreed in writing by the Agency) the site reference data identified in the site protection and monitoring programme shall be collected and submitted to the Agency.

4. Information

4.1 Records

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

(a) be legible;

(b) be made as soon as reasonably practicable;

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

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

(i) the site protection and monitoring programme.

4.1.2 Any records required to be made by this permit shall be supplied to the Agency within 14 days where the records have been requested in writing by the Agency.

4.1.3 All records required to be held by this permit shall be held on the installation and shall be available for inspection by the Agency at any reasonable time.

4.2 Reporting

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

(a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the assessment of the impact of the emissions submitted with the application;

(b) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;

(c) the annual production /treatment data set out in schedule 5 table S5.2;

(d) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 of that schedule; and

(e) details of any contamination or decontamination of the site which has occurred.

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

(a) in respect of the parameters and emission points specified in schedule 5 table S5.1;

(b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.4; and

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

4.2.3 A summary report of the waste types and quantities accepted and removed from the site shall be made for each quarter. It shall be submitted to the Agency within one month of the end of the quarter and shall be in the format required by the Agency.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency.

4.2.6 The results of reviews and any changes made to the site protection and monitoring programme shall be reported to the Agency, within 1 month of the review or change.

4.3 Notifications

4.3.1 The Agency shall be notified without delay following the detection of:

(a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;

(b) the breach of a limit specified in the permit;

(c) any significant adverse environmental effects.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.

4.3.3 Prior written notification shall be given to the Agency of the following events and in the specified timescales:

(a) as soon as practicable prior to the permanent cessation of any of the activities;

(b) cessation of operation of part or all of the activities for a period likely to exceed 1 year; and

(c) resumption of the operation of part or all of the activities after a cessation notified under (b) above.

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

4.3.5 Where the Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.6 The Agency shall be notified within 7 days of any changes in technically competent management and the name of any incoming person together with evidence that such person has the required technical competence.

4.3.7 The Agency shall be provided, within 14 days of the operator or any relevant person being convicted of a relevant offence, (unless such information has already been notified to the Agency), with details of the nature of the offence, the place and date of conviction, and the sentence imposed.

4.3.8 The Agency shall be notified within 14 days of the operator and/or any relevant person lodging an appeal against a conviction for any relevant offence and of the outcome when the appeal is decided.

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

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

(b) 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); and

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

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 7 shall have the meaning given in that schedule.

Schedule 1 – Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the PPC Regulations	**Description of specified activity and WFD Annex IIA and IIB operations**	**Limits of specified activity and waste types**
S5.3 A1(a)	Storage of hazardous wastes (D15).	From receipt of waste to introduction to treatment processes or off site transfer for disposal. Containerised wastes stored in the areas as detailed on drawing emp/ppc/101. Bulk wastes stored in vessels CL1, CL2, AR3, AR4, AR5, AR6, AR7, AR8, CN1, CN2, CN3, CN4, Lime Silo 1, Lime Silo 2, PFT19, Jumbo, S1, S2, S3, S4, S5, S6, T1, T2, T3, T4. Waste types as specified in Schedule 3 table S3.2.
S5.3 A1(a)	Oxidation of cyanide wastes (D9).	Tanks CN1, CN2, CN3, CN4 Waste types as specified in Schedule 3 table S3.2, column 1.
S5.3 A1(a)	Physico-chemical treatment of waste consisting of pH adjustment, redox, mixing and settlement (including addition of coagulants and flocculents) (D9).	Vessels SP4, SP5, SP6, SP7, Jumbo, PFT19 Waste types as specified in Schedule 3 table S3.2, column 2. Including production of lime slurry in Lime Tanks A and B.
S5.3 A1(a)	Physico-chemical treatment of waste consisting acidification, mixing and settlement (Sludge conditioning) (D9).	Vessels T1, T2, T3, T4, Jumbo, PFT19 Waste types as specified in Schedule 3 table S3.2, column 3
S5.3 A1(a)	Physico-chemical treatment of waste consisting of acidification and mixing (D9).	APC mixers 1, 2, 3 Waste types as specified in Schedule 3 table S3.2, column 3
S5.3 A1(a)	Filtration of wastes (D9).	Filter presses in Press Building. Waste types as specified in Schedule 3 table S3.2, column 4 and wastes produced by treatment process.
S5.3 A1(b)	Storage and phase separation of waste oil (R13, R3).	Vessels RT1, RT2, ST1, ST2, ST3, ST4, ST5. From receipt of waste to off site transfer of separated oil and transfer of residues to treatment. Waste types as specified in Schedule 3 table S3.2, column 5.
Directly Associated Activity		
Tanker washing	Washing of heavy sludge/residues from tanker after delivery of wastes.	Tanker wash sump.
Drum washing, crushing and shredding	Washing and/or crushing or shredding of drums and other containers (D9, R4).	Washing of containers arising from storage and treatment operations. Shredding or crushing of washed containers arising from storage and treatment operations.
Waste storage	Storage of non-hazardous wastes prior to submission to treatment on site (D15).	From receipt of waste to introduction to treatment processes. Containerised wastes stored in the areas detailed on drawing emp/ppc/101. Bulk wastes stored in vessels CL1, CL2, AR3, AR4, AR5, AR6, AR7, AR8, CN1, CN2, CN3, CN4, Lime Silo 1, Lime Silo 2, PFT19, Jumbo, S1, S2, S3, S4, S5, S6, T1, T2, T3, T4 Waste types as specified in Schedule 3 table S3.2.

Table S1.1 activities		
Activity listed in Schedule 1 of the PPC Regulations	**Description of specified activity and WFD Annex IIA and IIB operations**	**Limits of specified activity and waste types**
Waste storage	Storage of solid wastes arising from treatment operations prior to off site disposal or recovery (D15, R13).	Wastes arising from treatment processes. Stored in Filter cake bunkers as detailed on drawing emp/ppc/101.
Waste storage	Storage of final site effluent prior to discharge to sewer (D9).	Tanks FT4, FT5, FT6, FT8, Braithwaite Effluent arising from site treatment operations and surface water drainage only.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The responses to sections 2.1 and 2.2 of the application, excluding B1.1.1, B2.1.1, B2.1.21 (File 2 Item 2, Item 3 main plant item list only), B2.2.4 (detail relating to the cyanide plant scrubber only), Total Site Plan (drawing No. emp/ppc/02), Site Location Plan (drawing No. emp/ppc/08).	22/09/2005
Schedule 4 Notice dated 22/03/2006	Answers to questions 1 to 41, excluding Revised Total Site Plan (drawing No. emp/ppc/02), response to Question 9.	25/04/2006
Schedule 4 Notice dated 13/04/2006	Answers to questions 1, 2 and 3.	12/05/2006
Request for additional information dated 05/05/2006	Revised Drawings emp/ppc/31A and emp/ppc/33A	08/05/2006
Request for additional information dated 30/08/2006	Revised Installation boundary details including Site Boundary drawing emp/ppc/02b, redundant tank information and amendments concerning the cyanide scrubber.	05/09/2006
Request for additional information dated 23/10/2006	Revised section B1.1.1, Revised B2.1.23.	26/10/2006, 27/10/2006

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IP1	The Operator shall produce and implement written procedures (and any amendments to them) that accord with section 2.1.1 of Sector Guidance Note S5.06, to assess waste prior to acceptance on the site.	24/02/2007
IP2	The Operator shall produce and implement written procedures (and any amendments to them) that accord with section 2.1.2 of Sector Guidance Note S5.06, to cover: load arrival; load inspection; sampling methodology for wastes, and records.	24/02/2007
IP3	The Operator shall produce and implement written procedures (and any amendments to them) that accord with section 2.1.3 of Sector Guidance Note S5.06, to cover: segregation (including compatibility) waste storage; emergency storage; compatibility when bulking; storage of materials with special storage requirements.	24/02/2007
IP4	The Operator shall produce and implement written procedures (and any amendments to them) that accord with section 2.1.4 of Sector Guidance Note S5.06, to cover compatibility testing prior to submission to treatment.	24/02/2007
IP5	The Operator shall submit to the Agency for approval written proposals, including timescales, for the installation of infrastructure required for the waste reception, quarantine and waste storage areas that accord with Sections 2.1.3 and 2.2.5 of Sector Guidance Note S5.06. In particular the operator's proposals shall: • ensure that storage area drainage infrastructure is sufficient to contain contaminated run-off and prevent drainage from incompatible wastes from coming into contact with each other. • provide a perimeter barrier (or equivalent) to the flammable drum storage area to prevent stored waste packages falling outside the perimeter containment bund.	24/05/2007

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	• provide appropriate storage facilities for gas cylinders and aerosols. • provide appropriate storage for facilities for drum storage pending transfer and empty drums awaiting crushing and shredding, including containment and vehicle collision protection measures. • assess whether improved fire separation measures are required between the flammables storage area and the cyanide storage bay. The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	
IP6	The Operator shall submit to the Agency for approval written proposals, including timescales, for any changes necessary to all waste storage and treatment vessels and associated containment bunds required to achieve compliance with the relevant standards in Sections 2.1.3, 2.1.4 and 2.2.5 of Sector Guidance Note 5.06. The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	24/11/2007
IP7	The Operator shall inspect the site perimeter fencing and gates and ensure that any defects are repaired so as to ensure the site is secure.	24/02/2007
IP8	The Operator shall submit to the Agency for approval written proposals, including timescales, for the installation of automatic fault warning alarms for the chemical absorption scrubbers ASS1, SPS1, JTS1, APCSS1 and APCMS1. The proposals shall be implemented by the Operator from the date of approval in writing by the Agency.	24/08/2007
IP9	The Operator shall submit to the Agency a report on the results of a monitoring exercise to characterise the releases of the substances set out below from the emission points listed. Releases shall be assessed, on a minimum of four separate occasions, using methodology set out in Agency Guidance Note M2: Monitoring of Stack Emissions to Air. Emission point A1: ammonia, hydrogen cyanide, chlorine Emission point: A2: acid gases, nitrogen oxides Emission points A3, A4, A5, A6: acid gases, nitrogen oxides, ammonia, hydrogen sulphide and total VOCs The report shall include, but not be limited to, the following: • a summary of the monitoring results; • comparison with the benchmark figures for releases specified in Section 3.2 of the Agency Guidance Note IPPC S4.03; • an impact assessment for the emissions, in accordance with the H1 methodology; • proposals and a timetable for improvements, where emissions exceed the specified benchmark figure.	24/11/2008
IP10	A written procedure shall be submitted to the Agency detailing the measures to be used so that monitoring equipment, personnel and organisations employed for the emissions monitoring programme shall have either MCERTS certification or accreditation in accordance with condition 3.6.3. Where MCERTS does not apply the Operator shall review current monitoring procedures against the relevant standards in section 2.10 of Sector Guidance Note 5.06. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the operator from the date of approval in writing by the Agency.	24/11/2007

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IP11	Unless stated otherwise in the permit, the Operator shall implement the improvement proposals in Section B9 of the application to the timescales identified in that section, unless otherwise agreed by the Agency. The Operator shall summarise the progress of these improvements on a quarterly basis and report these to the Agency.	24/11/2009
IP12	The Operator shall undertake a noise assessment in accordance with the procedures given in BS4142: 1997 (Rating industrial noise affecting mixed residential and industrial areas) and BS7445: 2003 (Description and measurement of environmental noise) or other methodology as agreed with the Agency. A report of the assessment shall be submitted in writing to the Agency. The assessment shall identify all relevant sources of noise on site and consider the potential for noise impact on identified sensitive receptors during daytime, nighttime and weekends. Any noise source(s) identified as exhibiting tonal contributions shall be quantified by means of frequency analysis. Noise measurements shall be undertaken by an experienced and suitably qualified person. The report shall include a noise management plan containing details of required noise mitigation measures, associated management, inspection and maintenance regimes and proposed noise monitoring. Suitable time-scales for implementation and review shall also be included.	24/11/2007
IP13	The Operator shall produce a Site Surface Water and Effluent Management Plan for the installation. The plan shall be submitted in writing to the Agency. The plan shall: • ensure that there is adequate storage for all site surface water and effluent generated by the site prior to discharge. Storage shall be in accordance the requirements of sections 2.2.4 and 2.2.5 of Sector Guidance Note S5.06. • specify a programme for the removal of liquid accumulations from bunded areas, so as to maintain the capacity of the bunds for emergencies. • investigate the potential for collection and re-use or diversion from sewer of rainwater falling on uncontaminated areas within the site (e.g. from roofed areas). • provide an assessment of the capacity of the site to retain fire fighting runoff in accordance with the methodology outlined in PPG18. • include inspection and maintenance procedures for the sewer discharge pipework which ensure the integrity and capacity of the pipework.	24/05/2007
IP14	The Operator shall undertake monitoring of the final effluent discharge to sewer twice per month for 12 months for the following determinands to an appropriate limit of detection: Phenol; Pentachloro Phenol; 4 Chloro 3 Methyl Phenol; 2 Chloro Phenol; 3 Chloro Phenol; 4 Chloro Phenol; 2,4 Dichloro Phenol; Hydrogen Sulphide; Total Sulphide capable of producing Hydrogen Sulphide on acidification; Free Cyanide. A summary of the monitoring results shall be submitted in writing to the Agency.	24/12/2007
IP15	The Operator shall install the infrastructure required to ensure that drums that are not able to be re-used are cleaned to facilitate recycling or recovery by other means that accord with Section 2.1.13 of Sector Guidance Note S5.06, December 2004.	24/05/2008
IP16	The Operator shall install the infrastructure required to control emissions to air and water from drum crushing, shredding or cutting processes that accord with Section 2.1.13 of Sector Guidance Note S5.06, December 2004.	24/05/2008
IP17	The Operator shall update the site closure plan with proposals for the removal of the	24/05/2008

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	redundant tanks within the installation.	
IP18	The Operator shall submit to the Agency a risk assessment of the potential consequences of duct failure between the cyanide plant scrubber (CNS1) and the fan in its current location, compared to duct failure were the fan downstream of the scrubber. If the assessment indicates a higher risk in its current configuration a timetable for improving any deficiencies identified by the risk assessment shall be provided.	24/02/2007

Table S1.4 Appropriate measures for fugitive emissions	
Measure	**Date**
A fugitive emission management plan shall be submitted to the Agency, detailing the measures to be used to control fugitives emissions from the oil/water plant and shall be accordance with sections 2.2.4 and 2.2.5 of Sector Guidance Note S5.06. The plan shall be implemented by the operator within 3 months from the date of approval in writing by the Agency.	24/11/2007

Schedule 2 - Site plan

For further detail refer to plan emp/ppc/02b submitted 08/09/2006

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Schedule 3 - Waste types, raw materials and fuels

Table S3.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
-	

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
Maximum quantity	Total annual input of wastes to the site for all operations shall not exceed 188,100 tonnes. Storage quantities shall not exceed the following: Containerised waste: 600m^3 equivalent in containers Bulk acid storage: 324m^3 (AR3, AR4, AR5, AR6, AR7, AR8) Bulk hypohalite storage: 124m^3 (CL1, CL2) Bulk cyanide storage: 85m^3 (CN1, CN2, CN3, CN4) Bulk storage: 760m^3 (PFT19, Jumbo, T1, T2, T3, T4) Bulk APC residues storage: 450m^3 (S1,S2, S3, S4, S5, S6) Bulk lime storage: 60m^3 (Lime Silos 1, 2) Bulk oil storage: 566m^3 (RT1, RT2, ST1, ST2, ST3, ST4, ST5) Only the 6 digit codes (including the asterisk as appropriate for hazardous waste) are permitted					
Waste code	**Description**					
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**					
01 01	**wastes from mineral excavation**					
01 01 01	wastes from mineral metalliferous excavation		▬	▬	▬	
01 01 02	wastes from mineral non-metalliferous excavation		▬	▬	▬	
01 03	**wastes from physical and chemical processing of metalliferous minerals**					
01 03 04*	acid-generating tailings from processing of sulphide ore					
01 03 05*	other tailings containing dangerous substances					
01 03 07*	other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals		▬	▬	▬	
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**					
01 04 07*	wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals		▬	▬	▬	
01 05	**drilling muds and other drilling wastes**					
01 05 04	freshwater drilling muds and wastes		▬	▬	▬	
01 05 05*	oil-containing drilling muds and wastes					▬
01 05 06*	drilling muds and other drilling wastes containing dangerous substances		▬	▬	▬	
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06		▬	▬	▬	

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06		■	■	■	
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**					
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**					
02 01 01	sludges from washing and cleaning		■	■	■	
02 01 08*	agrochemical waste containing dangerous substances					
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**					
02 02 04	sludges from on-site effluent treatment		■	■	■	
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**					
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation		■	■	■	
02 03 02	wastes from preserving agents		■	■		
02 03 04	materials unsuitable for consumption or processing		■	■	■	
02 03 05	sludges from on-site effluent treatment		■	■	■	
02 04	**wastes from sugar processing**					
02 04 02	off-specification calcium carbonate		■	■		
02 04 03	sludges from on-site effluent treatment		■	■	■	
02 05	**wastes from the dairy products industry**					
02 05 02	sludges from on-site effluent treatment		■	■	■	
02 06	**wastes from the baking and confectionery industry**					
02 06 02	wastes from preserving agents		■	■		
02 06 03	sludges from on-site effluent treatment		■	■	■	
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**					
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials		■	■	■	
02 07 03	wastes from chemical treatment		■	■	■	
02 07 04	materials unsuitable for consumption or processing		■	■	■	
02 07 05	sludges from on-site effluent treatment		■	■	■	
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
03 01	**wastes from wood processing and the production of panels and furniture**					
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances					
03 02	**wastes from wood preservation**					
03 02 01*	non-halogenated organic wood preservatives					
03 02 02*	organochlorinated wood preservatives					
03 02 03*	organometallic wood preservatives					
03 02 04*	inorganic wood preservatives		▬	▬		
03 02 05*	other wood preservatives containing dangerous substances		▬	▬		
03 03	**wastes from pulp, paper and cardboard production and processing**					
03 03 02	green liquor sludge (from recovery of cooking liquor)		▬	▬	▬	
03 03 05	de-inking sludges from paper recycling		▬	▬	▬	
03 03 09	lime mud waste		▬	▬	▬	
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation		▬	▬	▬	
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10		▬	▬	▬	
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**					
04 01	**wastes from the leather and fur industry**					
04 01 03*	degreasing wastes containing solvents without a liquid phase					
04 01 06	sludges, in particular from on-site effluent treatment containing chromium		▬	▬	▬	
04 01 07	sludges, in particular from on-site effluent treatment free of chromium		▬	▬	▬	
04 02	**wastes from the textile industry**					
04 02 14*	wastes from finishing containing organic solvents					
04 02 15	wastes from finishing other than those mentioned in 04 02 14		▬	▬	▬	
04 02 16*	dyestuffs and pigments containing dangerous substances		▬	▬		
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16		▬	▬		
04 02 19*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19		▬	▬	▬	
05	**WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL**					
05 01	**wastes from petroleum refining**					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
05 01 02*	desalter sludges		■	■	■	
05 01 03*	tank bottom sludges		■	■		
05 01 04*	acid alkyl sludges		■	■		
05 01 05*	oil spills					■
05 01 06*	oily sludges from maintenance operations of the plant or equipment					■
05 01 07*	acid tars					
05 01 08*	other tars					
05 01 09*	sludges from on-site effluent treatment containing dangerous substances		■	■	■	
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09		■	■	■	
05 01 11*	wastes from cleaning of fuels with bases		■	■		■
05 01 12*	oil containing acids					
05 01 13	boiler feedwater sludges		■	■	■	
05 01 14	wastes from cooling columns		■	■	■	
05 01 15*	spent filter clays		■	■	■	
05 06	**wastes from the pyrolytic treatment of coal**					
05 06 01*	acid tars					
05 06 03*	other tars					
05 06 04	waste from cooling columns		■	■	■	
05 07	**wastes from natural gas purification and transportation**					
05 07 01*	wastes containing mercury		■	■		
05 07 02	wastes containing sulphur		■	■		
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**					
06 01	**wastes from the manufacture, formulation, supply and use (MFSU) of acids**					
06 01 01*	sulphuric acid and sulphurous acid		■	■		
06 01 02*	hydrochloric acid		■	■		
06 01 03*	hydrofluoric acid		■	■		
06 01 04*	phosphoric and phosphorous acid		■	■		
06 01 05*	nitric acid and nitrous acid		■	■		

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
06 01 06*	other acids		■	■		
06 02	**wastes from the MFSU of bases**					
06 02 01*	calcium hydroxide		■	■		
06 02 03*	ammonium hydroxide		■	■		
06 02 04*	sodium and potassium hydroxide		■	■		
06 02 05*	other bases		■	■		
06 03	**wastes from the MFSU of salts and their solutions and metallic oxides**					
06 03 11*	solid salts and solutions containing cyanides	■				
06 03 13*	solid salts and solutions containing heavy metals		■	■		
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13		■	■		
06 03 15*	metallic oxides containing heavy metals		■	■	■	
06 03 16	metallic oxides other than those mentioned in 06 03 15		■	■	■	
06 04	**metal-containing wastes other than those mentioned in 06 03**					
06 04 03*	wastes containing arsenic		■	■	■	
06 04 04*	wastes containing mercury		■	■	■	
06 04 05*	wastes containing other heavy metals		■	■	■	
06 05	**sludges from on-site effluent treatment**					
06 05 02*	sludges from on-site effluent treatment containing dangerous substances		■	■	■	
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02		■	■	■	
06 06	**wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes**					
06 06 02*	wastes containing dangerous sulphides		■	■	■	
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02		■	■	■	
06 07	**wastes from the MFSU of halogens and halogen chemical processes**					
06 07 01*	wastes containing asbestos from electrolysis					
06 07 02*	activated carbon from chlorine production					
06 07 03*	barium sulphate sludge containing mercury		■	■	■	
06 07 04*	solutions and acids, for example contact acid		■	■		
06 08	**wastes from the MFSU of silicon and silicon derivatives**					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
06 08 02*	wastes containing dangerous silicones					
06 09	**wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes**					
06 09 03*	calcium-based reaction wastes containing or contaminated with dangerous substances		■	■	■	
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03		■	■	■	
06 10	**wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture**					
06 10 02*	wastes containing dangerous substances		■	■	■	
06 11	**wastes from the manufacture of inorganic pigments and opacificiers**					
06 11 01	calcium-based reaction wastes from titanium dioxide production		■	■	■	
06 13	**wastes from inorganic chemical processes not otherwise specified**					
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides.		■	■		
06 13 02*	spent activated carbon (except 06 07 02)					
06 13 04*	wastes from asbestos processing					
06 13 05*	soot					
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**					
07 01	**wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**					
07 01 01*	aqueous washing liquids and mother liquors		■	■	■	
07 01 03*	organic halogenated solvents, washing liquids and mother liquors					
07 01 04*	other organic solvents, washing liquids and mother liquors					
07 01 07*	halogenated still bottoms and reaction residues					
07 01 08*	other still bottoms and reaction residues		■	■		
07 01 09*	halogenated filter cakes and spent absorbents					
07 01 10*	other filter cakes and spent absorbents					
07 01 11*	sludges from on-site effluent treatment containing dangerous substances		■	■	■	
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11		■	■	■	
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**					
07 02 01*	aqueous washing liquids and mother liquors		■	■	■	
07 02 03*	organic halogenated solvents, washing liquids and mother liquors					
07 02 04*	other organic solvents, washing liquids and mother liquors					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
07 02 07*	halogenated still bottoms and reaction residues					
07 02 08*	other still bottoms and reaction residues		▬	▬		
07 02 09*	halogenated filter cakes and spent absorbents					
07 02 10*	other filter cakes and spent absorbents					
07 02 11*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11		▬	▬	▬	
07 02 14*	wastes from additives containing dangerous substances		▬	▬		
07 02 15	wastes from additives other than those mentioned in 07 02 14		▬	▬		
07 02 16*	wastes containing dangerous silicones					
07 02 17	wastes containing silicones other than those mentioned in 07 02 16		▬	▬		
07 03	**wastes from the MFSU of organic dyes and pigments (except 06 11)**					
07 03 01*	aqueous washing liquids and mother liquors		▬	▬	▬	
07 03 03*	organic halogenated solvents, washing liquids and mother liquors					
07 03 04*	other organic solvents, washing liquids and mother liquors					
07 03 07*	halogenated still bottoms and reaction residues					
07 03 08*	other still bottoms and reaction residues		▬	▬		
07 03 09*	halogenated filter cakes and spent absorbents					
07 03 10*	other filter cakes and spent absorbents					
07 03 11*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11		▬	▬	▬	
07 04	**wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides**					
07 04 01*	aqueous washing liquids and mother liquors		▬	▬	▬	
07 04 03*	organic halogenated solvents, washing liquids and mother liquors					
07 04 04*	other organic solvents, washing liquids and mother liquors					
07 04 07*	halogenated still bottoms and reaction residues					
07 04 08*	other still bottoms and reaction residues		▬	▬		
07 04 09*	halogenated filter cakes and spent absorbents					
07 04 10*	other filter cakes and spent absorbents					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
07 04 11*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11		▬	▬	▬	
07 04 13*	solid wastes containing dangerous substances					
07 05	**wastes from the MFSU of pharmaceuticals**					
07 05 01*	aqueous washing liquids and mother liquors		▬	▬	▬	
07 05 03*	organic halogenated solvents, washing liquids and mother liquors					
07 05 04*	other organic solvents, washing liquids and mother liquors					
07 05 07*	halogenated still bottoms and reaction residues					
07 05 08*	other still bottoms and reaction residues		▬	▬		
07 05 09*	halogenated filter cakes and spent absorbents					
07 05 10*	other filter cakes and spent absorbents					
07 05 11*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11		▬	▬	▬	
07 05 13*	solid wastes containing dangerous substances					
07 06	**wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics**					
07 06 01*	aqueous washing liquids and mother liquors		▬	▬	▬	
07 06 03*	organic halogenated solvents, washing liquids and mother liquors					
07 06 04*	other organic solvents, washing liquids and mother liquors					
07 06 07*	halogenated still bottoms and reaction residues					
07 06 08*	other still bottoms and reaction residues		▬	▬		
07 06 09*	halogenated filter cakes and spent absorbents					
07 06 10*	other filter cakes and spent absorbents					
07 06 11*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11		▬	▬	▬	
07 07	**wastes from the MFSU of fine chemicals and chemical products not otherwise specified**					
07 07 01*	aqueous washing liquids and mother liquors		▬	▬	▬	
07 07 03*	organic halogenated solvents, washing liquids and mother liquors					
07 07 04*	other organic solvents, washing liquids and mother liquors					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
07 07 07*	halogenated still bottoms and reaction residues					
07 07 08*	other still bottoms and reaction residues		▬	▬		
07 07 09*	halogenated filter cakes and spent absorbents					
07 07 10*	other filter cakes and spent absorbents					
07 07 11*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11		▬	▬	▬	
08	**WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**					
08 01	**wastes from MFSU and removal of paint and varnish**					
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances					
08 01 12	waste paint and varnish other than those mentioned in 08 01 11		▬	▬		
08 01 13*	sludges from paint or varnish containing organic solvents or other dangerous substances					
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13		▬	▬	▬	
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances		▬	▬	▬	
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15		▬	▬	▬	
08 01 17*	wastes from paint or varnish removal containing organic solvents or other dangerous substances					
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17		▬	▬	▬	
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances		▬	▬		
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19		▬	▬	▬	
08 01 21*	waste paint or varnish remover		▬	▬		
08 02	**wastes from MFSU of other coatings (including ceramic materials)**					
08 02 02	aqueous sludges containing ceramic materials		▬	▬	▬	
08 02 03	aqueous suspensions containing ceramic materials		▬	▬	▬	
08 03	**wastes from MFSU of printing inks**					
08 03 07	aqueous sludges containing ink		▬	▬	▬	
08 03 08	aqueous liquid waste containing ink		▬	▬	▬	
08 03 12*	waste ink containing dangerous substances					
08 03 14*	ink sludges containing dangerous substances					
08 03 16*	waste etching solutions		▬	▬		

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
08 03 17*	waste printing toner containing dangerous substances					
08 03 19*	disperse oil					■
08 04	**wastes from MFSU of adhesives and sealants (including waterproofing products)**					
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances					
08 04 11*	adhesive and sealant sludges containing organic solvents or other dangerous substances					
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11		■	■		
08 04 13*	aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous substances					
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13		■	■		
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other dangerous substances					
08 04 17*	rosin oil					■
08 05	**wastes not otherwise specified in 08**					
08 05 01*	waste isocyanates					
09	**WASTES FROM THE PHOTOGRAPHIC INDUSTRY**					
09 01	**wastes from the photographic industry**					
09 01 01*	water-based developer and activator solutions		■	■		
09 01 02*	water-based offset plate developer solutions		■	■		
09 01 03*	solvent-based developer solutions					
09 01 04*	fixer solutions		■	■		
09 01 05*	bleach solutions and bleach fixer solutions		■	■		
09 01 06*	wastes containing silver from on-site treatment of photographic wastes		■	■		
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03					
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06		■	■		
10	**WASTES FROM THERMAL PROCESSES**					
10 01	**wastes from power stations and other combustion plants (except 19)**					
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)			■		
10 01 02	coal fly ash			■		
10 01 03	fly ash from peat and untreated wood			■		
10 01 04*	oil fly ash and boiler dust					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form		▬	▬	▬	
10 01 09*	sulphuric acid		▬	▬		
10 01 13*	fly ash from emulsified hydrocarbons used as fuel			▬		
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing dangerous substances			▬		
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14			▬		
10 01 16*	fly ash from co-incineration containing dangerous substances			▬		
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16			▬		
10 01 18*	wastes from gas cleaning containing dangerous substances		▬	▬	▬	
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18		▬	▬	▬	
10 01 20*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20		▬	▬	▬	
10 01 22*	aqueous sludges from boiler cleansing containing dangerous substances		▬	▬	▬	
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22		▬	▬	▬	
10 01 25	wastes from fuel storage and preparation of coal-fired power plants		▬	▬		▬
10 01 26	wastes from cooling-water treatment		▬	▬	▬	
10 02	**wastes from the iron and steel industry**					
10 02 07*	solid wastes from gas treatment containing dangerous substances			▬		
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07			▬		
10 02 11*	wastes from cooling-water treatment containing oil					▬
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11		▬	▬	▬	
10 02 13*	sludges and filter cakes from gas treatment containing dangerous substances		▬	▬	▬	
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13		▬	▬	▬	
10 02 15	other sludges and filter cakes		▬	▬	▬	
10 03	**wastes from aluminium thermal metallurgy**					
10 03 04*	primary production slags					
10 03 08*	salt slags from secondary production					
10 03 09*	black drosses from secondary production					
10 03 15*	skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
10 03 17*	tar-containing wastes from anode manufacture					
10 03 19*	flue-gas dust containing dangerous substances			▬		
10 03 20	flue-gas dust other than those mentioned in 10 03 19			▬		
10 03 21*	other particulates and dust (including ball-mill dust) containing dangerous substances					
10 03 23*	solid wastes from gas treatment containing dangerous substances			▬		
10 03 25*	sludges and filter cakes from gas treatment containing dangerous substances		▬	▬	▬	
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25		▬	▬	▬	
10 03 27*	wastes from cooling-water treatment containing oil					▬
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27		▬	▬	▬	
10 03 29*	wastes from treatment of salt slags and black drosses containing dangerous substances					
10 04	**wastes from lead thermal metallurgy**					
10 04 01*	slags from primary and secondary production					
10 04 02*	dross and skimmings from primary and secondary production					
10 04 03*	calcium arsenate					
10 04 04*	flue-gas dust			▬		
10 04 05*	other particulates and dust			▬		
10 04 06*	solid wastes from gas treatment			▬		
10 04 07*	sludges and filter cakes from gas treatment		▬	▬	▬	
10 04 09*	wastes from cooling-water treatment containing oil					▬
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09		▬	▬	▬	
10 05	**wastes from zinc thermal metallurgy**					
10 05 03*	flue-gas dust			▬		
10 05 04	other particulates and dust			▬		
10 05 05*	solid waste from gas treatment			▬		
10 05 06*	sludges and filter cakes from gas treatment		▬	▬	▬	
10 05 08*	wastes from cooling-water treatment containing oil					▬
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08		▬	▬	▬	
10 05 10*	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
10 06	**wastes from copper thermal metallurgy**					
10 06 03*	flue-gas dust			■		
10 06 04	other particulates and dust			■		
10 06 06*	solid wastes from gas treatment			■		
10 06 07*	sludges and filter cakes from gas treatment		■	■	■	
10 06 09*	wastes from cooling-water treatment containing oil					■
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09		■	■	■	
10 07	**wastes from silver, gold and platinum thermal metallurgy**					
10 07 03	solid wastes from gas treatment			■		
10 07 04	other particulates and dust			■		
10 07 05	sludges and filter cakes from gas treatment		■	■	■	
10 07 07*	wastes from cooling-water treatment containing oil					■
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07		■	■	■	
10 08	**wastes from other non-ferrous thermal metallurgy**					
10 08 04	particulates and dust			■		
10 08 08*	salt slag from primary and secondary production					
10 08 10*	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities					
10 08 12*	tar-containing wastes from anode manufacture					
10 08 15*	flue-gas dust containing dangerous substances			■		
10 08 16	flue-gas dust other than those mentioned in 10 08 15			■		
10 08 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances		■	■	■	
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17		■	■	■	
10 08 19*	wastes from cooling-water treatment containing oil					■
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19		■	■	■	
10 09	**wastes from casting of ferrous pieces**					
10 09 05*	casting cores and moulds which have not undergone pouring containing dangerous substances					
10 09 07*	casting cores and moulds which have undergone pouring containing dangerous substances					
10 09 09*	flue-gas dust containing dangerous substances			■		

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
10 09 10	flue-gas dust other than those mentioned in 10 09 09			■		
10 09 11*	other particulates containing dangerous substances			■		
10 09 12	other particulates other than those mentioned in 10 09 11			■		
10 09 13*	waste binders containing dangerous substances					
10 09 15*	waste crack-indicating agent containing dangerous substances					
10 10	**wastes from casting of non-ferrous pieces**					
10 10 05*	casting cores and moulds which have not undergone pouring, containing dangerous substances					
10 10 07*	casting cores and moulds which have undergone pouring, containing dangerous substances					
10 10 09*	flue-gas dust containing dangerous substances			■		
10 10 10	flue-gas dust other than those mentioned in 10 10 09			■		
10 10 11*	other particulates containing dangerous substances			■		
10 10 12	other particulates other than those mentioned in 10 10 11			■		
10 10 13*	waste binders containing dangerous substances					
10 10 14	waste binders other than those mentioned in 10 10 13			■		■
10 10 15*	waste crack-indicating agent containing dangerous substances					
10 11	**wastes from manufacture of glass and glass products**					
10 11 05	particulates and dust			■		
10 11 09*	waste preparation mixture before thermal processing, containing dangerous substances					
10 11 11*	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)					
10 11 13*	glass-polishing and -grinding sludge containing dangerous substances		■	■	■	
10 11 14	glass-polishing and -grinding sludge other than those mentioned in 10 11 13		■	■	■	
10 11 15*	solid wastes from flue-gas treatment containing dangerous substances			■		
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15			■		
10 11 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances		■	■	■	
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17		■	■	■	
10 11 19*	solid wastes from on-site effluent treatment containing dangerous substances			■		
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19			■		
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
10 12 03	particulates and dust			■		
10 12 05	sludges and filter cakes from gas treatment		■	■	■	
10 12 09*	solid wastes from gas treatment containing dangerous substances			■		
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09			■		
10 12 11*	wastes from glazing containing heavy metals					
10 12 13	sludge from on-site effluent treatment		■	■	■	
10 13	**wastes from manufacture of cement, lime and plaster and articles and products made from them**					
10 13 04	wastes from calcination and hydration of lime		■	■		
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)			■		
10 13 07	sludges and filter cakes from gas treatment		■	■	■	
10 13 09*	wastes from asbestos-cement manufacture containing asbestos					
10 13 12*	solid wastes from gas treatment containing dangerous substances			■		
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12			■		
10 13 14	waste concrete and concrete sludge		■	■	■	
10 14	**waste from crematoria**					
10 14 01*	waste from gas cleaning containing mercury			■	■	
11	**WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY**					
11 01	**wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)**					
11 01 05*	pickling acids		■	■		
11 01 06*	acids not otherwise specified		■	■		
11 01 07*	pickling bases		■	■		
11 01 08*	phosphatising sludges		■	■	■	
11 01 09*	sludges and filter cakes containing dangerous substances		■	■	■	
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09		■	■	■	
11 01 11*	aqueous rinsing liquids containing dangerous substances		■	■	■	
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11		■	■	■	
11 01 13*	degreasing wastes containing dangerous substances		■	■	■	

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
11 01 14	degreasing wastes other than those mentioned in 11 01 13		■	■	■	
11 01 15*	eluate and sludges from membrane systems or ion exchange systems containing dangerous substances		■	■	■	
11 01 16*	saturated or spent ion exchange resins					
11 01 98*	other wastes containing dangerous substances		■	■	■	■
11 02	**wastes from non-ferrous hydrometallurgical processes**					
11 02 02*	sludges from zinc hydrometallurgy (including jarosite, goethite)		■	■	■	
11 02 05*	wastes from copper hydrometallurgical processes containing dangerous substances		■	■	■	
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05		■	■	■	
11 02 07*	other wastes containing dangerous substances		■	■	■	■
11 03	**sludges and solids from tempering processes**					
11 03 01*	wastes containing cyanide	■				
11 03 02*	other wastes		■	■	■	■
11 05	**wastes from hot galvanising processes**					
11 05 03*	solid wastes from gas treatment			■		
11 05 04*	spent flux					
12	**WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS**					
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**					
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)					■
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)					■
12 01 08*	machining emulsions and solutions containing halogens		■	■		■
12 01 09*	machining emulsions and solutions free of halogens		■	■		■
12 01 10*	synthetic machining oils					■
12 01 12*	spent waxes and fats					
12 01 14*	machining sludges containing dangerous substances		■	■	■	
12 01 15	machining sludges other than those mentioned in 12 01 14		■	■	■	
12 01 16*	waste blasting material containing dangerous substances					
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil					■
12 01 19*	readily biodegradable machining oil					■

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
12 01 20*	spent grinding bodies and grinding materials containing dangerous substances		■	■	■	
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20		■	■	■	
12 03	**wastes from water and steam degreasing processes (except 11)**					
12 03 01*	aqueous washing liquids		■	■	■	■
12 03 02*	steam degreasing wastes		■	■	■	■
13	**OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)**					
13 01	**waste hydraulic oils**					
13 01 01*	hydraulic oils, containing PCBs					
13 01 04*	chlorinated emulsions		■	■		■
13 01 05*	non-chlorinated emulsions		■	■		■
13 01 09*	mineral-based chlorinated hydraulic oils					■
13 01 10*	mineral based non-chlorinated hydraulic oils					■
13 01 11*	synthetic hydraulic oils					■
13 01 12*	readily biodegradable hydraulic oils					■
13 01 13*	other hydraulic oils					■
13 02	**waste engine, gear and lubricating oils**					
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils					■
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils					■
13 02 06*	synthetic engine, gear and lubricating oils					■
13 02 07*	readily biodegradable engine, gear and lubricating oils					■
13 02 08*	other engine, gear and lubricating oils					■
13 03	**waste insulating and heat transmission oils**					
13 03 01*	insulating or heat transmission oils containing PCBs					
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01					■
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils					■
13 03 08*	synthetic insulating and heat transmission oils					■
13 03 09*	readily biodegradable insulating and heat transmission oils					■
13 03 10*	other insulating and heat transmission oils					■

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
13 04	**bilge oils**					
13 04 01*	bilge oils from inland navigation					■
13 04 02*	bilge oils from jetty sewers					■
13 04 03*	bilge oils from other navigation					■
13 05	**oil/water separator contents**					
13 05 01*	solids from grit chambers and oil/water separators					■
13 05 02*	sludges from oil/water separators		■	■	■	■
13 05 03*	interceptor sludges		■	■	■	■
13 05 06*	oil from oil/water separators					■
13 05 07*	oily water from oil/water separators					■
13 05 08*	mixtures of wastes from grit chambers and oil/water separators		■	■	■	■
13 07	**wastes of liquid fuels**					
13 07 01*	fuel oil and diesel					■
13 07 02*	petrol					
13 07 03*	other fuels (including mixtures)					■
13 08	**oil wastes not otherwise specified**					
13 08 01*	desalter sludges or emulsions		■	■	■	■
13 08 02*	other emulsions		■	■		■
14	**WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)**					
14 06	**waste organic solvents, refrigerants and foam/aerosol propellants**					
14 06 01*	chlorofluorocarbons, HCFC, HFC					
14 06 02*	other halogenated solvents and solvent mixtures					
14 06 03*	other solvents and solvent mixtures					
14 06 04*	sludges or solid wastes containing halogenated solvents					
14 06 05*	sludges or solid wastes containing other solvents					
15	**WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**					
15 01	**packaging (including separately collected municipal packaging waste)**					
15 01 10*	packaging containing residues of or contaminated by dangerous substances					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers					
15 02	**absorbents, filter materials, wiping cloths and protective clothing**					
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances					
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**					
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**					
16 01 07*	oil filters					
16 01 08*	components containing mercury					
16 01 09*	components containing PCBs					
16 01 11*	brake pads containing asbestos					
16 01 13*	brake fluids					■
16 01 14*	antifreeze fluids containing dangerous substances		■	■		■
16 01 15	antifreeze fluids other than those mentioned in 16 01 14		■	■		■
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14					■
16 02	**wastes from electrical and electronic equipment**					
16 02 09*	transformers and capacitors containing PCBs					
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09					
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC					
16 02 12*	discarded equipment containing free asbestos					
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12					■
16 02 15*	hazardous components removed from discarded equipment					■
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15					■
16 03	**off-specification batches and unused products**					
16 03 03*	inorganic wastes containing dangerous substances		■	■	■	
16 03 04	inorganic wastes other than those mentioned in 16 03 03		■	■	■	
16 03 05*	organic wastes containing dangerous substances		■	■		■
16 03 06	organic wastes other than those mentioned in 16 03 05		■	■		■
16 05	**gases in pressure containers and discarded chemicals**					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
16 05 04*	gases in pressure containers (including halons) containing dangerous substances					
16 05 06*	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals					
16 05 07*	discarded inorganic chemicals consisting of or containing dangerous substances	■	■	■		
16 05 08*	discarded organic chemicals consisting of or containing dangerous substances		■	■		
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	■	■	■		■
16 06	**batteries and accumulators**					
16 06 01*	lead batteries					
16 06 02*	Ni-Cd batteries					
16 06 03*	mercury-containing batteries					
16 06 06*	separately collected electrolyte from batteries and accumulators		■	■		
16 07	**wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)**					
16 07 08*	wastes containing oil					■
16 07 09*	wastes containing other dangerous substances		■	■		
16 08	**spent catalysts**					
16 08 02*	spent catalysts containing dangerous transition metals or dangerous transition metal compounds					
16 08 05*	spent catalysts containing phosphoric acid		■	■		
16 08 06*	spent liquids used as catalysts		■	■		
16 08 07*	spent catalysts contaminated with dangerous substances					
16 09	**oxidising substances**					
16 09 01*	permanganates, for example potassium permanganate		■	■		
16 09 02*	chromates, for example potassium chromate, potassium or sodium dichromate		■	■		
16 09 03*	peroxides, for example hydrogen peroxide		■	■		
16 09 04*	oxidising substances, not otherwise specified	■	■	■		
16 10	**aqueous liquid wastes destined for off-site treatment**					
16 10 01*	aqueous liquid wastes containing dangerous substances		■	■	■	
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01		■	■	■	
16 10 03*	aqueous concentrates containing dangerous substances		■	■		
16 10 04	aqueous concentrates other than those mentioned in 16 10 03		■	■		

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
16 11	**waste linings and refractories**					
16 11 01*	carbon-based linings and refractories from metallurgical processes containing dangerous substances					
16 11 03*	other linings and refractories from metallurgical processes containing dangerous substances					
16 11 05*	linings and refractories from non-metallurgical processes containing dangerous substances					
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**					
17 01	**concrete, bricks, tiles and ceramics**					
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances					
17 02	**wood, glass and plastic**					
17 02 04*	glass, plastic and wood containing or contaminated with dangerous substances					
17 03	**bituminous mixtures, coal tar and tarred products**					
17 03 01*	bituminous mixtures containing coal tar					
17 03 03*	coal tar and tarred products					
17 04	**metals (including their alloys)**					
17 04 09*	metal waste contaminated with dangerous substances					
17 04 10*	cables containing oil, coal tar and other dangerous substances					
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**					
17 05 03*	soil and stones containing dangerous substances					
17 05 05*	dredging spoil containing dangerous substances					
17 05 07*	track ballast containing dangerous substances					
17 06	**insulation materials and asbestos-containing construction materials**					
17 06 01*	insulation materials containing asbestos					
17 06 03*	other insulation materials consisting of or containing dangerous substances					
17 06 05*	construction materials containing asbestos					
17 08	**gypsum-based construction material**					
17 08 01*	gypsum-based construction materials contaminated with dangerous substances					
17 09	**other construction and demolition wastes**					
17 09 01*	construction and demolition wastes containing mercury					
17 09 02*	construction and demolition wastes containing PCB (for example PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)					

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
17 09 03*	other construction and demolition wastes (including mixed wastes) containing dangerous substances					
18	**WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)**					
18 01	**wastes from natal care, diagnosis, treatment or prevention of disease in humans**					
18 01 06*	chemicals consisting of or containing dangerous substances		▬	▬		▬
18 01 07	chemicals other than those mentioned in 18 01 06		▬	▬		
18 01 10*	amalgam waste from dental care					
18 02	**wastes from research, diagnosis, treatment or prevention of disease involving animals**					
18 02 05*	chemicals consisting of or containing dangerous substances		▬	▬		▬
18 02 06	chemicals other than those mentioned in 18 02 05		▬	▬		
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**					
19 01	**wastes from incineration or pyrolysis of waste**					
19 01 05*	filter cake from gas treatment					
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes		▬	▬		
19 01 07*	solid wastes from gas treatment			▬		
19 01 10*	spent activated carbon from flue-gas treatment					
19 01 11*	bottom ash and slag containing dangerous substances			▬		
19 01 12	bottom ash and slag other than those mentioned in 19 01 11			▬		
19 01 13*	fly ash containing dangerous substances			▬		
19 01 14	fly ash other than those mentioned in 19 01 13			▬		
19 01 15*	boiler dust containing dangerous substances			▬		
19 01 16	boiler dust other than those mentioned in 19 01 15			▬		
19 01 17*	pyrolysis wastes containing dangerous substances					
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**					
19 02 03	premixed wastes composed only of non-hazardous wastes		▬	▬	▬	
19 02 04*	premixed wastes composed of at least one hazardous waste		▬	▬	▬	
19 02 05*	sludges from physico/chemical treatment containing dangerous substances		▬	▬	▬	
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05		▬	▬	▬	

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
19 02 07*	oil and concentrates from separation					■
19 02 08*	liquid combustible wastes containing dangerous substances					
19 02 09*	solid combustible wastes containing dangerous substances					
19 02 11*	other wastes containing dangerous substances		■	■	■	
19 03	**stabilised/solidified wastes**					
19 03 04*	wastes marked as hazardous, partly stabilised					
19 03 06*	wastes marked as hazardous, solidified					
19 04	**vitrified waste and wastes from vitrification**					
19 04 02*	fly ash and other flue-gas treatment wastes			■		
19 04 03*	non-vitrified solid phase					
19 07	**landfill leachate**					
19 07 02*	landfill leachate containing dangerous substances		■	■	■	
19 07 03	landfill leachate other than those mentioned in 19 07 02		■	■	■	
19 08	**wastes from waste water treatment plants not otherwise specified**					
19 08 02	waste from desanding		■	■	■	
19 08 06*	saturated or spent ion exchange resins		■			
19 08 07*	solutions and sludges from regeneration of ion exchangers		■			
19 08 08*	membrane system waste containing heavy metals		■			
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats					■
19 08 10*	grease and oil mixture from oil/water separation other than those mentioned in 19 08 09					■
19 08 11*	sludges containing dangerous substances from biological treatment of industrial waste water		■			
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11		■			
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water		■			■
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13		■			
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**					
19 09 02	sludges from water clarification		■	■	■	
19 09 03	sludges from decarbonation		■	■	■	
19 09 06	solutions and sludges from regeneration of ion exchangers		■	■	■	

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
19 10	**wastes from shredding of metal-containing wastes**					
19 10 03*	fluff-light fraction and dust containing dangerous substances					
19 10 05*	other fractions containing dangerous substances					
19 11	**wastes from oil regeneration**					
19 11 01*	spent filter clays					
19 11 02*	acid tars					
19 11 03*	aqueous liquid wastes		▬	▬	▬	
19 11 04*	wastes from cleaning of fuel with bases		▬	▬		▬
19 11 05*	sludges from on-site effluent treatment containing dangerous substances		▬	▬	▬	▬
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05		▬	▬	▬	
19 11 07*	wastes from flue-gas cleaning		▬	▬		
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**					
19 12 06*	wood containing dangerous substances					
19 12 10	combustible waste (refuse derived fuel)					▬
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances					
19 13	**wastes from soil and groundwater remediation**					
19 13 01*	solid wastes from soil remediation containing dangerous substances					
19 13 03*	sludges from soil remediation containing dangerous substances					
19 13 05*	sludges from groundwater remediation containing dangerous substances		▬	▬	▬	▬
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05		▬	▬	▬	
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous substances		▬	▬	▬	▬
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07		▬	▬	▬	
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**					
20 01	**separately collected fractions (except 15 01)**					
20 01 13*	solvents					
20 01 14*	acids		▬	▬		
20 01 15*	alkalines		▬	▬		

Table S3.2 Permitted waste types and quantities		1	2	3	4	5
20 01 17*	photochemicals		▬	▬		
20 01 19*	pesticides					
20 01 21*	fluorescent tubes and other mercury-containing waste					
20 01 23*	discarded equipment containing chlorofluorocarbons					
20 01 25	edible oil and fat					▬
20 01 26*	oil and fat other than those mentioned in 20 01 25					▬
20 01 27*	paint, inks, adhesives and resins containing dangerous substances					
20 01 29*	detergents containing dangerous substances		▬	▬		
20 01 30	detergents other than those mentioned in 20 01 29		▬	▬		
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries					
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components					
20 01 37*	wood containing dangerous substances					

Schedule 4 – Emissions and monitoring

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan ref. emp/ppc/05]	No parameters set	Scrubber CNS1 serving cyanide plant	No limit set	--	--	
A2 [Point A2 on site plan ref. emp/ppc/05]	No parameters set	Scrubber ASS1 serving PFT19 and acid storage tanks	No limit set	--	--	
A3 [Point A3 on site plan ref. emp/ppc/05]	No parameters set	Scrubber SPS1 serving SP tanks	No limit set	--	--	
A4 [Point A4 on site plan ref. emp/ppc/05]	No parameters set	Scrubber JTS1 serving Jumbo tank	No limit set	--	--	
A5 [Point A5 on site plan ref.] emp/ppc/05	No parameters set	Scrubber APCSS1 serving APC sludge tanks	No limit set	--	--	
A6 [Point A6 on site plan ref. emp/ppc/05]	No parameters set	Scrubber APCMS1 serving APC mixers	No limit set	--	--	
A7/8 [Point A7/8 on site plan ref. emp/ppc/05]	No parameters set	Dust filter LSDS1 serving Lime silos 1 and 2	No limit set	--	--	Permanent sampling access not required
A9 [Point A9 on site plan ref. emp/ppc/05]	No parameters set	Dust filter APCDF1 serving APC1 silo	No limit set	--	--	Permanent sampling access not required
A10 [Point A10 on site plan ref. emp/ppc/05]	No parameters set	Dust filter APCDF2 serving silo APC2	No limit set	--	--	Permanent sampling access not required
A11 [Point A11 on site plan ref. emp/ppc/05]	No parameters set	Dust filter APCDF3 serving silo APC3	No limit set	--	--	Permanent sampling access not required
A12 [Point A12 on site plan ref. emp/ppc/05]	No parameters set	Dust filter APCDF4 serving silo APC4	No limit set	--	--	Permanent sampling access not required
A13 [Point A13 on site plan ref. emp/ppc/05]	No parameters set	Dust filter APCDF5 serving APC5 silo	No limit set	--	--	Permanent sampling access not required
A14 [Point A14 on site plan ref. emp/ppc/05]	No parameters set	Dust filter APCDF6 serving silo APC6	No limit set	--	--	Permanent sampling access not required

Table S4.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
None						

Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1 [Point S1 on site plan ref. Emp/ppc/05] emission to Severn Trent Water Ltd sewer to Goscote Sewage Treatment Works	Ammonia	Process Effluent.	500 mg/l	Spot sample	Prior to discharge	In accordance with M18 methodology unless otherwise agreed in writing by the Agency.
	COD	Process Effluent.	15,000 mg/l	Spot sample	Prior to discharge	
	COD	Process Effluent.	3,000 kg/d	Spot sample	Prior to discharge	
	Suspended Solids	Process Effluent.	1000 mg/l	Spot sample	Prior to discharge	
	Total Cyanide	Process Effluent.	10 mg/l	Spot sample	Prior to discharge	
	Total Sulphides	Process Effluent.	1 mg/l	Spot sample	Prior to discharge	
	Total Phenols	Process Effluent.	32 kg/d	Spot sample	Prior to discharge	
	Monohydric phenols	Process Effluent.	250 mg/l	Spot sample	Prior to discharge	
	Cadmium	Process Effluent.	50 µg/l	Spot sample	Prior to discharge	
	Chromium	Process Effluent.	1.5 mg/l	Prior to discharge	Prior to discharge	
	Copper	Process Effluent.	3.5 mg/l	Spot sample	Prior to discharge	
	Lead	Process Effluent.	0.5 mg/l	Spot sample	Prior to discharge	
	Nickel	Process Effluent.	5mg/l	Spot sample	Prior to discharge	
	Silver	Process Effluent.	0.4 mg/l	Spot sample	Prior to discharge	
	Tin	Process Effluent.	0.4 mg/l	Spot sample	Prior to discharge	
	Zinc	Process Effluent.	5 mg/l	Spot sample	Prior to discharge	
	Volume	Process Effluent.	350 m^3/d	24 hour	When discharging	Ultrasonic Flow sensor
	Discharge rate	Process Effluent.	8 l/s	Instantaneous	When discharging	Ultrasonic Flow sensor

Table S4.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency [1]**	**Monitoring standard or method**	**Other specifications**
A1, Scrubber CNS1 serving cyanide plant	NaOH concentration	Daily	Not applicable	-
A2, Scrubber ASS1 serving PFT19 and acid storage tanks	NaOH concentration	Daily	Not applicable	-
A3, Scrubber SPS1 serving SP tanks	NaOH concentration	Daily prior to treatment commencing	Not applicable	-
A4, Scrubber JTS1 serving Jumbo tank	NaOH and H_2SO_4 concentrations	Daily prior to treatment commencing	Not applicable	-
A5, Scrubber APCSS1 serving APC sludge tanks	NaOH concentration	Daily prior to treatment commencing	Not applicable	-
A6, Scrubber ASS1 serving APC mixers	H_2SO_4 concentration	Daily prior to treatment commencing	Not applicable	-

Footnote [1] – Monitoring only required when vessels served by the scrubbers A1 – A6 are in use

Schedule 5 - Reporting

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

Table S5.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to Sewer Parameters as required by condition 3.6.1	S1	Every 6 months	24/11/2006

Table S5.2 Annual production/treatment

Parameter	Units
Effluent discharged to sewer	tonnes

Table S5.3 Performance parameters

Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWs

Table S5.4 Reporting forms

Media/parameter	Reporting format	Date of form
Sewer	Form sewer 1 or other form as agreed in writing by the Agency	24/11/2006
Water usage	Form water usage1 or other form as agreed in writing by the Agency	24/11/2006
Energy usage	Form energy 1 or other form as agreed in writing by the Agency	24/11/2006
Other performance indicators	Form performance 1 or other form as agreed in writing by the Agency	24/11/2006

Schedule 6 - Notification

These pages outline the information that the operator must provide.

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

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

Part A

Permit Number	**XP3637SE**
Name of operator	**Veolia ES (UK) Limited**
Location of Installation	**Stubbers Green Road** **Aldridge** **West Midlands** **WS9 8BL**
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution.	
To be notified within 24 hours of detection	
Date and time of the event.	
Reference or description of the location of the event.	
Description of where any release into the environment took place.	
Substances(s) potentially released.	
Best estimate of the quantity or rate of release of substances.	
Measures taken, or intended to be taken, to stop any emission.	
Description of the failure or accident.	

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

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

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

Part B - to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Veolia ES (UK) Ltd.

Schedule 7 - Interpretation

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

"accident management plan" means a documented procedure (or procedures) that set out the measures necessary to prevent accidents occurring within the permitted installation, during both normal and abnormal operations, and limit the consequences to human health or the environment of any such accidents that do occur.

"a*nnually*" means once every year.

"*application*" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 4 to the PPC Regulations.

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

"disposal" shall mean any of the operations provided for in Annex IIA to Directive 75/442/EEC.

"emissions to land", includes emissions to groundwater.

"fugitive emission" means an emission to air, water or land from the activities which is not controlled by an emission limit.

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

"land protection guidance", means Agency guidance "H7 - Guidance on the protection of land under the PPC Regime: application site report and site protection monitoring programme".

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

"notify/notified without delay" means that a telephone call can be used, whereas all other reports and notifications must be supplied in writing, either electronically or on paper.

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"*quarter*" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"recovery" shall mean any of the operations provided for in Annex IIB to Directive 75/442/EEC.

"relevant person" and *"relevant conviction"* shall have the meanings given to them in the Environmental

Protection Act 1990.

"*site protection and monitoring programme*" means a document which meets the requirements for site protection and monitoring programmes described in the Land Protection Guidance.

"technically competent management" and *"technical competence"* shall have the meanings given to them in the Environmental Protection Act 1990.

"waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England)Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"WFD" means Waste Framework Directive (75/442/EEC).

"year" means calendar year ending 31 December.

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

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

(a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

(b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

END OF PERMIT