

LICENCE REG. NO. P0480-01 HAS BEEN REVISED
Please note that licence Reg. No. P0480-01 was reviewed and replaced by the
revised licence Reg. No. P0480-02



Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

INTEGRATED POLLUTION CONTROL LICENCE

Licence Register Number:	480
Licensee:	FLS AEROSPACE (IRL) Limited
Location of Activity:	Dublin Airport, County Dublin

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Glossary of Terms

The Agency	Environmental Protection Agency.
The Licensee	FLS Aerospace (Irl) Limited, Team Centre, Maildrop 250, Dublin Airport, County Dublin.
AER	Annual Environmental Report.
Annually	All or part of a period of twelve consecutive months.
BATNEEC	Best Available Technology Not Entailing Excessive Cost.
Biannually	All or part of a period of six consecutive months.
BOD	5 day Biochemical Oxygen Demand.
COD	Chemical Oxygen Demand.
Daily	During all days of plant operation, and in the case of emissions, when emissions are taking place; with no more than 1 measurement on any one day.
Day	Any 24 hour period.
Daytime	0800 hrs to 2200 hrs.
dB(A)	Decibels (A weighted).
EMP	Environmental Management Programme.
EPA	Environmental Protection Agency
EWC	European Waste Catalogue (94/3/EEC, see also Agency Guidance Note on the EWC)
Fortnightly	At least 20 measurements in a calendar year with no more than one measurement in any one week.
GC/MS	Gas Chromatography/ Mass Spectroscopy
HFO	Heavy Fuel Oil.
ICP	Inductively Coupled Plasma Spectroscopy.
IPC	Integrated Pollution Control.
K	Kelvin.
kPa	kilo Pascals.
Leq	Equivalent continuous sound level.

Lighting-up time	30 minutes after sun set.
List I	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
List II	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
Local Authority	Fingal County Council.
Location of the Activity	Dublin Airport, Co. Dublin.
Mass Flow Limit	An Emission Limit Value which is expressed as the maximum mass of a substance which can be emitted per unit time. The limit is usually expressed in kilograms per hour (kg/h).
Mass Flow Threshold	A mass flow rate, above which, a concentration limit applies. The rate is usually expressed in kilograms per hour (e.g. at mass flow rates > 2 kg/h).
Monthly	At least 12 times per year at approximately monthly intervals.
Night-time	2200 hrs to 0800 hrs.
Noise sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
PER	Pollution Emission Register.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Sanitary Authority	Fingal County Council
Standard Methods	As detailed in "Standard Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F) 19th Ed. 1995, American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA.
TA Luft	Technical Instructions on Air Quality Control - TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBl. I p.721). Federal Ministry for Environment, Bonn 1986 and amendments.
Waste disposal operation	Means any of the operations included in the Third Schedule to the Waste Management Act 1996.
Waste recovery operation	Means any of the operations included in the Fourth Schedule to the Waste Management Act 1996.
Weekly	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with no more than one measurement in any one week.
WWTP	Waste Water Treatment Plant.

Reasons for the Decision

The Agency is satisfied, on the basis of the information available that, subject to compliance with the conditions of this licence, any emissions from the activity will comply with and not contravene any of the requirements of Section 83(3) of the Environmental Protection Agency Act, 1992.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant and the report of its inspector.

No objection having been received to the proposed determination, the licence is granted in accordance with the terms of the proposed determination and the reasons therefor.

Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act, 1992, the Agency hereby grants this Integrated Pollution Control licence to: FLS Aerospace (Irl) Limited, Team Centre, Maildrop 250, Dublin Airport, County Dublin,

under Section 83(1) of the said Act to carry on the following activities:-

The use of coating materials in processes with a capacity to use at least 10 tonnes per year of organic solvents, and electroplating operations

at Dublin Airport, County Dublin subject to the following Conditions (14 No.), with the reasons therefor and associated schedules attached thereto.

Conditions

Condition 1. Scope

- 1.1 The activity shall be controlled, operated, and maintained and emissions shall take place as set out in this Integrated Pollution Control licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.2 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in a material change or increase in:
 - 1.2.1 The nature or quantity of any emission,
 - 1.2.2 The abatement/treatment or recovery systems,
 - 1.2.3 The range of processes to be carried out,
 - 1.2.4 The fuels, raw materials, intermediates, products or wastes generated,or any changes in:
 - 1.2.5 The site management and control with adverse environmental significanceshall be carried out or commenced without prior notice to, and without the prior written agreement of, the Agency.
- 1.3 This licence is for the purposes of IPC licensing under the EPA Act, 1992 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactment's or regulations.

- 1.4 Any reference in this licence to 'site' shall mean the plan area edged in red and labelled 'Site Layout' in Attachment 2 of the IPC licence application.

Reason: To clarify the scope of this licence.

Condition 2. Management of the Activity

- 2.1 The licensee shall establish and maintain an Environmental Management System (EMS) which shall fulfil the requirements of this licence. The EMS shall assess all operations and review all practicable options for the use of cleaner technology, cleaner production and the reduction and minimisation of waste, and shall include as a minimum those elements specified in the Conditions 2.2 to 2.9 below:
- 2.2 A schedule of Environmental Objectives and Targets
- 2.2.1 The licensee shall prepare a schedule of Environmental Objectives and Targets. The schedule shall include time frames for the achievement of set targets. The schedule shall address a five year period as a minimum. The schedule shall be prepared to the satisfaction of the Agency and shall be submitted to the Agency within four months of date of grant of this licence. The schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (See also Condition 2.9).
- 2.2.2 The licensee shall have regard to those matters listed in *Schedule 6(i) Recording & Reporting to the Agency* when establishing the schedule of Objectives and Targets.
- 2.3 Environmental Management Programme (EMP)
- 2.3.1 The licensee shall, not later than six months from the date of grant of this licence, submit to the Agency for agreement an EMP, including a time schedule, for achieving objectives and targets. Once agreed the EMP shall be established and maintained by the licensee. It shall include:
- (i) designation of responsibility for targets;
 - (ii) the means by which they may be achieved;
 - (iii) the time within which they may be achieved.
- The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (Condition 2.9).
- 2.3.2 A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.
- 2.4 Pollution Emission Register (PER)
- 2.4.1 The substances to be included in the PER shall be agreed with the Agency each year by reference to the list specified in the AER guidance note. The PER shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted as part of the AER.

- 2.4.2 The licensee shall, not later than six months from the date of grant of this licence and thereafter as part of the AER, agree with the Agency the list of substances to be included in the PER, and the methodology to be used in their determination.
- 2.5 Documentation
- 2.5.1 The licensee shall establish and maintain an environmental management documentation system which shall be to the satisfaction of the Agency.
- 2.5.2 The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.
- 2.6 Corrective Action
- 2.6.1 The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.
- 2.7 Awareness and Training
- 2.7.1 The licensee shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.
- 2.7.2 Personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and/or experience, as required.
- 2.8 Responsibilities
- 2.8.1 The licensee shall ensure that a person in charge, as defined under the terms of the Environmental Protection Agency Act, 1992 shall be available on-site at all times when the activity is in operation. The person in charge shall also be available to meet with authorised persons of the Agency at all reasonable times.
- 2.9 Communications
- 2.9.1 The licensee shall put in place a programme to ensure that members of the public can obtain information concerning the environmental performance of the licensee at all reasonable times. This programme shall be submitted for agreement to the Agency within six months of the date of grant of this licence.
- 2.9.2 The licensee shall submit to the Agency, eighteen months from the date of grant of this licence, and each calendar year thereafter, an AER which shall be to the satisfaction of the Agency. This report shall include as a minimum the information specified in *Schedule 6(i) Recording & Reporting to the Agency* and shall be prepared in accordance with any relevant guidelines issued by the Agency.

Reason: To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.

Condition 3. Interpretation

3.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:-

3.1.1 For Non-Continuous Monitoring:

- (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
- (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
- (iii) Mass flow thresholds refer to a rate of discharge expressed in units of kg/h, above which the concentration emission limit value applies. Mass flow threshold rates shall be determined on the basis of a single 30 minute measurement (ie. the concentration determined as a 30 minute average shall be multiplied by an appropriate measurement of flow and the result shall be expressed in units of kg/h).
- (iv) Mass flow limits shall be calculated on the basis of the concentration, determined as an average over the specified period, multiplied by an appropriate measurement of flow. No value, so determined, shall exceed the mass flow limit value.
- (v) For all other parameters, no 30 minute mean value shall exceed the emission limit value.

3.2 The concentration limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of :-

3.2.1 In the case of non-combustion gases:

- (i) Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).

3.2.2 In the case of combustion gases:

- (i) Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels; 6% oxygen for solid fuels.

3.3 Emission limit values for emissions to sewer in this licence shall be interpreted in the following way:-

3.3.1 Continuous monitoring:

- (i) No flow value shall exceed the specified limit.
- (ii) No pH value shall deviate from the specified range.
- (iii) No temperature value shall exceed the limit value.

- 3.3.2 Non-Continuous Monitoring:
- (i) No pH value shall deviate from the specified range.
 - (ii) No temperature value shall exceed the limit value.
 - (iii) For parameters other than pH, temperature and flow, eight out of ten consecutive results, calculated as daily mean concentration or mass emission values on the basis of flow proportional composite sampling, shall not exceed the emission limit value. No individual result similarly calculated shall exceed 1.2 times the emission limit value.
 - (iv) For parameters other than pH, temperature, and flow, no grab sample value shall exceed 1.2 times the emission limit value.

3.4 Noise

- 3.4.1 Noise from the activity shall not give rise to sound pressure levels (Leq 15mins) measured at any noise sensitive location which exceed the limit value(s) by more than 2 dB(A).

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

Condition 4. Notification

- 4.1 The licensee shall notify the Agency by both telephone and facsimile, if available, to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
- 4.1.1 Any release to atmosphere from any potential emission point.
 - 4.1.2 Any emission which does not comply with the requirements of this licence.
 - 4.1.3 Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, or a Sanitary Sewer or personnel working in connection with a sewer, or requiring an emergency response by the Local Authority.

The licensee shall include as part of the notification, date and time of the incident, details of the occurrence, and the steps taken to minimise the emissions and avoid recurrence.

- 4.2 The licensee shall make a record of any incident as set out in Condition 4.1 above. The notification given to the Agency shall include details of the circumstances giving rise to the incident and all actions taken to minimise the effect on the environment and minimise wastes generated.
- 4.3 A summary report of reported incidents shall be submitted to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 4.4 In the event of any incident, as set out in Condition 4.1.2 above which relates to discharges to sewer, having taken place, the licensee shall notify the Sanitary Authority as soon as practicable, after such an incident.

- 4.5 In the case of any incident as set out in Condition 4.1.2 above which relates to discharges to water, the licensee shall notify the Eastern Regional Fisheries Board as soon as practicable after such an incident.
- 4.6 In the event of any incident, as set out in Condition 4.1.3 having taken place, the licensee shall notify the Local Authority as soon as practicable, after such an incident.

Reason : To provide for the notification of incidents and update information on the activity and to provide for the requirements of the Sanitary Authority in accordance with Section 97 of the EPA Act, 1992.

Condition 5. Emissions to Atmosphere

- 5.1 No specified emission to the atmosphere shall exceed the emission limit value set out in *Schedule 1(i) Emissions to Atmosphere* of this licence, subject to Condition 3 of this licence. There shall be no other emission to the atmosphere of environmental significance.
- 5.2 Test programme:
- 5.2.1 The licensee shall prepare, to the satisfaction of the Agency, a test programme for abatement equipment installed to abate emissions. This programme shall be submitted to the Agency, prior to implementation.
- 5.2.2 This programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
- 5.3 The test programme shall include as a minimum, the following:
- 5.3.1 Establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence.
- 5.3.2 Assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.
- 5.3.3 A report on the test programme shall be submitted to the Agency within one month of completion.
- 5.4 All treatment/abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the information submitted in the IPC licence application or as otherwise approved by the Agency under the Environmental Management Programme.
- 5.5 Monitoring and analyses of each emission shall be carried out as specified in *Schedule 1(ii) Monitoring of Emissions to Atmosphere* of this licence. A report on the results of this monitoring shall be submitted to the Agency on a quarterly basis.
- 5.6 A summary report of emissions to atmosphere shall be submitted to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 5.7 Boilers shall be operated so as to give a smoke colour less than or equal to shade number 1 on the Ringelmann chart except during periods of start up. Such start up periods shall not exceed 30 minutes in any 24 hour period.

- 5.8 The licensee shall ensure that all operations on-site shall be carried out in a manner such that air emissions and/or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.
- 5.9 The licensee shall not use paint strippers containing dichloromethane until the stack heights for emission point reference numbers A1 and A2 are raised to 20 metres above ground and are configured such that emissions vent in an upwardly direction.

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

Condition 6. Emissions to Water

- 6.1 There shall be no emissions to water of environmental significance.

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

Condition 7. Emissions to Sewer

- 7.1 No specified emission to sewer shall exceed the emission limit values set out in *Schedule 2(i) Emissions to Sewer*, subject to Condition 3 of this licence. There shall be no other emissions to sewer of environmental significance.
- 7.2 All treatment/abatement, control and monitoring equipment shall be calibrated and maintained at all times when in use, in accordance with the information submitted in Table 15(ii) of the IPC licence application or as otherwise approved by the Agency under the EMP.
- 7.3 Monitoring and analyses of each emission shall be carried out as specified in *Schedule 2(ii) Monitoring of Emissions to Sewer* of this licence. A report on the results of this monitoring shall be submitted to the Agency annually.
- 7.4 A summary report of emissions to sewer shall be submitted annually to the Sanitary Authority and to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 7.5 A representative sample of effluent shall be screened for the presence of organic compounds. The report on this screening shall be submitted to the Agency within three months of the date of grant of this licence. Such screening shall be repeated at intervals as requested by the Agency thereafter.
- 7.6 The licensee shall ensure that the effluent discharge shall not contain petroleum spirits or organic solvents (including chlorinated organic solvents) which would give rise to flammable or explosive vapours in the sewer.
- 7.7 The licensee shall permit authorised persons, of the Agency and Sanitary Authority, to inspect, examine and test, at all reasonable times, any works and apparatus installed in connection with the trade effluent and to take samples of the trade effluent.

- 7.8 Non-trade effluent wastewater (e.g. firewater, accidental spillage) which occurs on-site shall not be discharged to the sewer without the prior authorisation of the Sanitary Authority.
- 7.9 The daily average discharge of cadmium shall not exceed 0.6 grams of cadmium per kilogram of cadmium used (0.06 % by weight). The monthly average discharge of cadmium shall not exceed 0.3 grams per kilogram of cadmium used (0.03 % by weight).
- 7.10 The licensee shall install flow measuring gauges in order to measure the volume of trade effluent being discharged through emission points SE-1, SE-2 and SE-3. A flow measuring device shall also be installed to measure the volume of trade effluent being discharged from the cadmium electroplating line in order to quantify the amount of cadmium being discharged after a sample has been analysed.

Reason: By way of control, limitation, treatment and monitoring of emissions to provide for the protection of the environment and to provide for the requirements of the Sanitary Authority in accordance with Section 97 of the EPA Act, 1992.

Condition 8. Waste Management

- 8.1 Disposal or recovery of waste shall take place only as specified in *Schedule 3(i) Hazardous Waste for Disposal/Recovery and Schedule 3(ii) Other Wastes for Disposal/Recovery* of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be disposed of/recovered either on-site or off-site without prior notice to, and prior written agreement of, the Agency.
- 8.2 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency, and only transported from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment.
- 8.3 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:
- 8.3.1 The names of the agent and transporter of the waste.
 - 8.3.2 The name of the persons responsible for the ultimate disposal/recovery of the waste.
 - 8.3.3 The ultimate destination of the waste.
 - 8.3.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
 - 8.3.5 The tonnages and EWC Code for the waste materials listed in *Schedule 3(i) Hazardous Waste for Disposal/Recovery and Schedule 3(ii) Other Wastes for Disposal/Recovery*, sent off-site for disposal/recovery.
 - 8.3.6 Details of any rejected consignments.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site.

Reason: To provide for the disposal/recovery of waste and the protection of the environment.

Condition 9. Noise

- 9.1 Emissions shall not exceed the limit value specified in *Schedule 4(i) Noise*, subject to Condition 3 of this licence.
- 9.2 The licensee shall carry out a noise survey of the site operations annually. The licensee shall consult with the Agency on the timing, nature and extent of the survey and shall develop a survey programme to the satisfaction of the Agency. The survey programme shall be submitted to the Agency in writing at least one month before the survey is to be carried out. A record of the survey results shall be available for inspection by any authorised persons of the Agency, at all reasonable times and a summary report of this record shall be included as part of the AER.
- 9.3 For sources:
- (i) NS3 - APU.
 - (ii) NS4 - Air intake Hanger 5
 - (iii) NS5 - Compressor Louver Hanger 4

the licensee shall prepare a programme to reduce noise emissions. This must highlight specific goals and a time scale, together with options for modification, upgrading or replacement. The licensee shall submit the programme to the Agency within six months from the date of grant of this licence. A report on the implementation of this programme shall be submitted to the Agency within nine months of the date of approval by the Agency of the programme.

- 9.4 The Licensee shall not operate the APU Cell during night-time.

Reason: To provide for the protection of the environment by control of noise.

Condition 10. Non-Process Water

- 10.1 Surface water
- 10.1.1 A visual examination of the surface water discharge shall be carried out daily. A log of such inspections shall be maintained.
 - 10.1.2 The licensee shall monitor surface water discharges in accordance with *Schedule 5 (i) Surface Water Discharge Monitoring* of this licence. Within one month of the date of grant of this licence, the licensee shall submit to the Agency, for agreement, the location(s) of such monitoring points. A report on the results of this monitoring shall be submitted to the Agency quarterly and a summary report shall be submitted as part of the AER.
 - 10.1.3 In the event that any analyses or observations made on the quality or appearance of surface water runoff should indicate that contamination has taken place, the licensee shall
 - (i) carry out an immediate investigation to identify and isolate the source of the contamination,

(ii) put in place measures to prevent further contamination and to minimise the effects of any contamination on the environment,

(iii) and notify the Agency as soon as is practicable.

10.2 Firewater Retention.

10.2.1 The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment within six months from the date of grant of this licence.

10.2.2 In the event that a significant risk exists for the release of contaminated fire-water, the licensee shall, based on the findings of the risk assessment, prepare and implement, with the agreement of the Agency, a suitable risk management programme. The risk management programme shall be fully implemented within three months from date of notification by the Agency.

10.2.3 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities when implementing Conditions 10.2.1 and 10.2.2 above.

10.3 Groundwater

10.3.1 The licensee shall maintain groundwater monitoring wells at the following locations:

- (i) S8, S9, S13, S17 and S20
- (ii) MW-2, MW-3 MW-4 and MW-6

as outlined in the IPC Licence Application (Drawing No. 2.1, Attachment 15B, Page 4).

10.3.2 Any additional groundwater monitoring boreholes required by the Agency shall be constructed to a standard, and at locations, to be agreed with the Agency.

10.3.3 All groundwater monitoring points shall be included in the site's maintenance programme.

Groundwater monitoring points S8,S9,S13,S17 and S20 shall be sampled and analysed in accordance with *Schedule 5(ii) Groundwater Monitoring* of this licence. A report of such results shall be submitted annually as part of the AER.

10.3.4 Groundwater monitoring wells S1, S2, S3, S5, S6, S7, S10, S12, S15, S16, S18, S19, S21, S22 and S23 shall be adequately sealed to remove potential contamination migration pathways from the surface to the boulder clays.

10.4 Facilities for the Protection of Groundwater and Surface Water

10.4.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein. In addition, tank and drum storage areas shall, as a minimum be bunded, either locally or remotely, to a volume not less than the greater of the following;

- (i) 110% of the capacity of the largest tank or drum within the bunded area
- (ii) 25% of the total volume of substance which could be stored within the bunded area.

Drainage from bunded areas shall be diverted for collection and safe disposal. All bunds shall be tested at least once every three years. A report on such tests shall be included in the AER.

- 10.4.2 The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee to the satisfaction of the Agency and shall be reported to the Agency within three months from the date of grant of this licence.
- 10.4.3 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run - off. While awaiting disposal, all materials shall be collected and stored in designated areas protected against spillage and leachate run - off.
- 10.4.4 The licensee shall undertake a programme of testing and inspection of underground tanks and pipelines to ensure that all underground effluent and foul sewer pipes are tested at least once every three years. A report on such tests shall be included in the AER.
- 10.4.5 The licensee shall implement procedures for the proper handling of materials in the chemical storage, waste oil storage and fuel tank areas. In addition procedures shall also be implemented for the proper filling of diesel tanks/refuelling of vehicles and the removal of oil from the oil/water separator.
- 10.4.6 The licensee shall have in storage an adequate supply of containment booms and suitable absorbent material to contain and absorb any spillage.

Reason: To provide for the protection of surface waters and groundwater.

Condition 11. Monitoring

- 11.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out in Schedules:-

Schedule 1(ii): Monitoring of Emissions to Atmosphere.

Schedule 2(ii): Monitoring of Emissions to Sewer.

Schedule 5(i): Surface Water Discharge Monitoring.

Schedule 5(ii): Groundwater Monitoring

of this licence.

- 11.2 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions to air. This programme shall be included in the Environmental Management Programme.
- 11.3 Where the ability to measure a parameter is affected by mixing before emission, then, with prior written agreement from the Agency, the parameter may be assessed before mixing takes place.
- 11.4 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.

- 11.5 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 11.6 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the written agreement of the Agency following evaluation of test results.
- 11.7 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 11.8 The licensee shall provide safe and permanent access to the following sampling and monitoring points:
- 11.8.1 Final effluent as discharged to sewer.
 - 11.8.2 Emission to atmosphere sampling points.
 - 11.8.3 Noise sources on-site.
 - 11.8.4 Waste storage areas on-site.
 - 11.8.5 Surface waters discharge.
 - 11.8.6 On-site ground-water monitoring wells.

and safe access to any other sampling and monitoring points required by the Agency.

- 11.9 The licensee shall, within three months of the date of grant of this licence, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.

Reason: To ensure compliance with the requirements of other conditions of this licence by provision of a satisfactory system of measurement and monitoring of emissions.

Condition 12. Recording and Reporting to Agency

- 12.1 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.
- 12.2 The licensee shall record all incidents which affect the normal operation of the activity and which may create an environmental risk.
- 12.3 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint. The licensee shall submit a report to the Agency, during the month following such complaints, giving details of any complaints which arise. A summary of the number and nature of complaints received shall be included in the AER.
- 12.4 The format of all records required by this licence shall be to the satisfaction of the Agency. Records shall be retained on-site for a period of not less than seven years and shall be available for inspection by the Agency at all reasonable times.
- 12.5 Reports of all recording, sampling, analyses, measurements, examinations, calibrations and maintenance as set out in *Schedule 6(i) Recording and Reporting to the Agency of*

this licence, shall be submitted to the Agency Headquarters as specified in this licence. The format of these reports shall be to the satisfaction of the Agency. One original and three copies shall be submitted as and when specified.

- 12.6 Provision shall also be made for the transfer of environmental information, in relation to this licence, to the Agency's computer system, as may be requested by the Agency.
- 12.7 All reports shall be certified accurate and representative by the licensee's Plant Manager or other senior officer designated by the Plant Manager.
- 12.8 All written procedures controlling operations affecting this licence shall be available on-site for inspection by the Agency at all reasonable times.
- 12.9 The frequency and scope of reporting, as set out in this licence, may be amended with the written agreement of the Agency following evaluation of test results.

Reason: To provide for the collection and reporting of adequate information on the activity.

Condition 13. Emergency Response

- 13.1 The licensee shall within six months of the date of grant of this licence, ensure that a documented Emergency Response Procedure is in place, which shall address any emergency situation which may originate on-site. This Procedure shall include provision for minimising the effects of any emergency on the environment.

Reason: To provide for the protection of the environment.

Condition 14. Financial Provisions

14.1 Agency Charges

14.1.1 The licensee shall pay to the Agency a minimum annual contribution of £ 7,454 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Act, 1992. The licensee shall in 2000 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Consumer Price Index from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 1999, the licensee shall pay a pro rata amount from the date of this licence to December 31 1999. This amount shall be paid to the Agency within one month of the date of grant of this licence

14.2 Sanitary Authority Charges

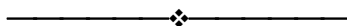
14.2.1 The licensee shall pay an annual charge of £3,250 to the Sanitary Authority towards the cost of monitoring the trade effluent. This amount will be revised from time to time. Payment to be made on demand.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment and to provide for the requirements of the Sanitary Authority in accordance with Section 97 of the EPA Act, 1992.

Schedule 1(i) Emissions to Atmosphere

Emission Point Reference No.:	A1	
Location :	Hanger 3 (Extraction system)	
Volume to be emitted:	Maximum in any one day :	1,800,000 m ³
	Maximum rate per hour :	100,000 m ³
Minimum discharge height:	15.02 m above ground (until September 28, 1999) 20 m above ground (from September 29, 1999)	

Parameter	Emission Limit Value	
	Until February 28, 2000	From March 1, 2000
Class B Compounds	800 mg/m ³	20 mg/m ³
Class III Inorganic Dust Particles	5 mg/m ³	
Total Organics (as C)	50 mg/m ³	



Emission Point Reference No.:	A2	
Location :	Hanger 3 (Main Extraction System)	
Volume to be emitted:	Maximum in any one day :	1,800,000 m ³
	Maximum rate per hour :	100,000 m ³
Minimum discharge height:	15.03 m above ground (until September 28, 1999) 20 m above ground (from September 29, 1999)	

Parameter	Emission Limit Value	
	Until February 28, 2000	From March 1, 2000
Class B compounds	450 mg/m ³	20 mg/m ³
Total Organics (as C)	65 mg/m ³	50 mg/m ³
Class III Inorganic Dust Particles	5 mg/m ³	



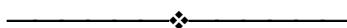
Emission Point Reference No.: A9

Location : Hanger 1(Plating shop Chrome scrubber)

Volume to be emitted: Maximum in any one day : 240,000 m³
Maximum rate per hour : 10,000 m³

Minimum discharge height: 9.55 m above ground

Parameter	Emission Limit Value
Class III Inorganic Dust Particles	5 mg/m ³



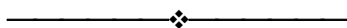
Emission Point Reference No.: A18

Location : Hanger 1 (Plating Shop Degreaser)

Volume to be emitted: Maximum in any one day : 396,288 m³
Maximum rate per hour : 1,650 m³

Minimum discharge height: 7.1 m above ground

Parameter	Emission Limit Value	
	Until November 30, 1999	From December 1, 1999
Class B Compounds	6,000 mg/m ³	20 mg/m ³
Total Organics (as C)	50 mg/m ³	



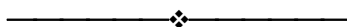
Emission Point Reference No.: A31

Location : Hanger 1(APU Degreaser)

Volume to be emitted: Maximum in any one day : 13,000 m³
Maximum rate per hour : 1,625 m³

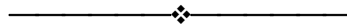
Minimum discharge height: 4.7 m above ground

Parameter	Emission Limit Value
Class B Compounds	20 mg/m ³
Total Organics (as C)	50 mg/m ³



Emission Point Reference No.: A35
Location : Hanger 3 (Wet Paint Spray Booth)
Volume to be emitted: Maximum in any one day : 198,000 m³
 Maximum rate per hour : 11,000 m³
Minimum discharge height: 8.8 m above ground

Parameter	Emission Limit Value
Total Organics (as C)	50 mg/m ³
Particulates	150 mg/m ³ (<0.5kg/hr)



Emission Point Reference No.: A36
Location : Hanger 3 (Wet Paint Spray booth)
Volume to be emitted: Maximum in any one day : 261,000 m³
 Maximum rate per hour : 14,500 m³
Minimum discharge height: 8.8 m above ground

Parameter	Emission Limit Value
Total Organics (as C)	50 mg/m ³
Particulates	150 mg/m ³ (<0.5kg/hr)



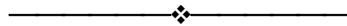
Emission Point Reference No.: A37
Location : Hanger 3(Wet Paint Spray Booth)
Volume to be emitted: Maximum in any one day : 162,000 m³
 Maximum rate per hour : 9,000 m³
Minimum discharge height: 8.8 m above ground

Parameter	Emission Limit Value
Total Organics (as C)	50 mg/m ³
Particulates	150 mg/m ³ (<0.5kg/hr)



Emission Point Reference No.:	A42	
Location :	Hanger 5 (Main paint Spray Booth)	
Volume to be emitted:	Maximum in any one day :	220,000 m ³
	Maximum rate per hour :	27,400 m ³
Minimum discharge height:	5.6 m above ground	

Parameter	Emission Limit Value
Total Organics (as C)	50 mg/m ³
Particulates	150 mg/m ³ (<0.5kg/hr)



Schedule 1(ii) Monitoring of Emissions to Atmosphere

Emission Point Reference No's.: A1, A2, A18 and A31

Parameter	Monitoring Frequency*	Analysis Method/Technique
Total Organics	Quarterly	GC/FID
Class B Compounds	Quarterly	Adsorption/desorption GC

* When maximum emissions are occurring



Emission Point Reference No.: A9

Parameter	Monitoring Frequency*	Analysis Method/Technique
Class III Inorganic Dust Particles	Quarterly	Gravimetric / AA or IPC

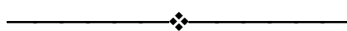
* When maximum emissions are occurring



Emission Point Reference No's.: A35, A36, A37 and A42

Parameter	Monitoring Frequency*	Analysis Method/Technique
Class III Inorganic Dust Particles	Quarterly	Gravimetric / AA or ICP
Total Organics (as C)	Quarterly	GC/FID
Particulates	Quarterly	Isokinetic

* When maximum emissions are occurring



Schedule 2(i) Emissions to Sewer

Emission Point Reference No.: SE-1
Name of Receiving Waters: Foul Sewer
Location : Emission to sewer between Hanger 1 and the plant room
Volume to be emitted: Maximum in any one day : 60 m³

Parameter	Emission Limit Value		
	Grab mg/l	Daily Mean mg/l	Daily Mean Kg/day
Temperature	42°C (max.)		
pH	6-10		
BOD	1200	1000	60
COD	2400	2000	120
Suspended Solids	1000	800	48
Sulphates (as SO ₄)	500	500	30
Detergents (as MBAS)	100	100	6
Fats, Oils, Grease	100	100	6
Chromium (as Cr)	0.5	0.5	0.03
Copper (as Cu)	0.5	0.5	0.03
Nickel (as Ni)	0.5	0.5	0.03
Silver (as Ag)	0.1	0.1	0.006
Tin (as Sn)	2	2	0.12
Cyanide (as CN)	0.2	0.2	0.012
Cadmium (as Cd)	0.05	0.05	0.003



Emission Point Reference No.: SE -2
Name of Receiving Waters: Foul Sewer
Location : South of Hangar 4

Volume to be emitted: Maximum in any one day : 60 m³

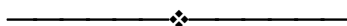
Parameter	Emission Limit Value		
Temperature	42°C (max.)		
pH	6-10		
	Grab mg/l	Daily Mean mg/l	Daily Mean Kg/day
BOD	1200	1000	60
COD	2400	2000	120
Suspended Solids	1000	800	48
Detergents (as MBAS)	100	100	6
Fats, Oils, Grease	100	100	6



Emission Point Reference No.: SE-3
Name of Receiving Waters: Foul Sewer
Location : South of Hangar 6

Volume to be emitted: Maximum in any one day : 15 m³

Parameter	Emission Limit Value		
Temperature	42°C (max.)		
pH	6-10		
	Grab mg/l	Daily Mean mg/l	Daily Mean Kg/day
BOD	1200	1000	15
COD	2400	2000	30
Suspended Solids	1000	800	12
Detergents (as MBAS)	100	100	1.5
Fats, Oils, Grease	100	100	1.5



Schedule 2(ii) Monitoring of Emissions to Sewer

Emission Point Reference No.: SE-1

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Continuous	On-line temperature probe with recorder
pH	Continuous	pH electrode/meter and recorder
COD	Monthly ^{Note 1}	Standard Method
BOD	Monthly ^{Note 1}	Standard Method
Suspended Solids	Monthly ^{Note 1}	Gravimetric
Sulphates (as SO ₄)	Monthly ^{Note 1}	Standard Method
Fats, Oils, Grease	Monthly ^{Note 1}	Standard Method
Detergents (as MBAS)	Monthly ^{Note 1}	Standard Method
Chromium	Monthly ^{Note 1}	Atomic Absorption/ICP
Copper	Monthly ^{Note 1}	Atomic Absorption/ICP
Nickel	Monthly ^{Note 1}	Atomic Absorption/ICP
Silver	Monthly ^{Note 1}	Atomic Absorption/ICP
Tin	Monthly ^{Note 1}	Atomic Absorption/ICP
Cadmium	Monthly ^{Note 1}	Atomic Absorption/ICP

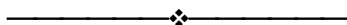
Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.



Emission Point Reference No.: SE-2

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Continuous	On-line temperature probe with recorder
pH	Continuous	pH electrode/meter and recorder
COD	Monthly ^{Note 1}	Standard Method
BOD	Monthly ^{Note 1}	Standard Method
Suspended Solids	Monthly ^{Note 1}	Gravimetric
Fats, Oils, Grease	Monthly ^{Note 1}	Standard Method
Detergents (as MBAS)	Monthly ^{Note 1}	Standard Method

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.



Emission Point Reference No.: SE-3

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Continuous	On-line temperature probe with recorder
pH	Continuous	pH electrode/meter and recorder
COD	Monthly ^{Note 1}	Standard Method
BOD	Every 2 months ^{Note 1}	Standard Method
Suspended Solids	Every 2 months ^{Note 1}	Gravimetric
Fats, Oils, Grease	Every 2 months ^{Note 1}	Standard Method
Detergents (as MBAS)	Every 2 months ^{Note 1}	Standard Method

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.

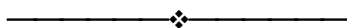
Schedule 3(i) Hazardous Wastes for Disposal/Recovery

Waste Materials	Further Treatment, Recovery/Recycling On-Site ^{Note 1}	On-Site Reuse ^{Note1}	Method of Disposal/Recovery ^{Note 2}
Mixed Solvents/Paints	None	None	Agreed hazardous waste disposal contractor.
Inorganic Waste Chemicals	None	None	Agreed hazardous waste disposal contractor.
Fluorescent Tubes/Bulbs	None	None	Agreed hazardous waste recovery contractor.
Aircraft Batteries	None	None	Agreed hazardous waste recovery contractor.
Miscellaneous adhesives/sealants	None	None	Agreed hazardous waste disposal contractor.
Scrap Metal (containing Beryllium waste)	None	None	Agreed hazardous waste recovery contractor.
Waste Oils/Fuel	None	None	Agreed hazardous waste recovery contractor.
Other ^{Note 3}			

Note 1: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 2: Any variation from those contractors named in the IPC Licence application, or subsequent agreements, must have the prior written agreement of the Agency. In cases where a previously agreed waste contractor is considered by the Agency not to exercise due care in respect of the transport and disposal of the licensee's waste, the Agency may at any time instruct a licensee to stop using this contractor.

Note 3: No other hazardous waste shall be disposed of/recovered off-site or on site without prior notice to, and prior agreement of the Agency



Schedule 3(ii) Other Wastes for Disposal/Recovery

Waste Materials	Further Treatment, Recovery/Recycling On-Site ^{Note1}	On-Site Reuse ^{Note1}	Method of Disposal/Recovery ^{Note 2}
Office waste	None	None	Agreed disposal contractor.
Food waste	None	None	Agreed disposal contractor.
Scrap metal	None	None	Agreed recovery/disposal contractor.
Timber/Paper/Plastic	None	None	Agreed disposal contractor.
Other ^{Note 3}			

Note 1: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 2: Any variation from those contractors named in the IPC Licence application, or subsequent agreements, must have the prior written agreement of the Agency. In cases where a previously agreed waste contractor is considered by the Agency not to exercise due care in respect of the transport and disposal of the licensee's waste, the Agency may at any time instruct a licensee to stop using this contractor.

Note 3: No other waste shall be disposed of/recovered off-site without prior notice to, and prior written agreement of the Agency.



Schedule 4(i) Noise

Sources

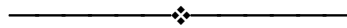
Source Location	Reference	Sound Pressure Limit - dB(A)	Reference distance (m)
Exhaust - Hanger 3 (East side)	NS1	86	10
Extract - Hanger 5	NS2	68	5
APU South side (at full load)	NS3	89	5
APU North side (at full load)	NS3	61	10
Air Intake - Hanger 5	NS4	69	3
Compressor Louver - Hanger 4	NS5	68	3
Exhaust- Hanger 3 (West side)	NS6	77	10



Schedule 5 (i) Surface Water Discharge Monitoring

Emission Point Reference No's: Monitoring locations to be agreed with the Agency

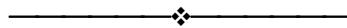
Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Weekly	pH electrode/meter
COD	Monthly	Standard Method
Visual Inspection	Weekly	Sample and examine for colour and odour



Schedule 5(ii) Groundwater Monitoring

Emission Point Reference No's: Bore-Holes S8, S9, S13, S17 and S20

Parameter	Monitoring Frequency	Analysis Method/Technique
Individual Heavy Metals	Biannually	Atomic Absorption/ICP
Volatile Organic Carbons	Biannually	Purge and trap/GC/MS (U.S. EPA Method 524.4)
Diesel Range Hydrocarbons	Biannually	GC



Schedule 6(i) Recording and Reporting to the Agency

Completed reports shall be submitted to:

The Environmental Protection Agency
P.O. Box 3000
Johnstown Castle Estate
County Wexford

or Any other address as may be specified by the Agency

Reports are required to be forwarded as set out below:

Recurring Reports:

Report	Reporting Frequency	Report Submission Date
Monitoring of emissions to atmosphere	Quarterly	Ten days after the period being reported on.
Monitoring of emissions to sewer	Annually	Ten days after the end of the period being reported on.
Surface Water	Quarterly	Ten days after the end of the period being reported on.
Noise monitoring programme	Annually	One month prior to survey
Complaints (where these arise)	Monthly	Ten days after end of the month being reported on.
Annual Environment Report(AER)	Annually	Eighteen months from the date of grant of licence and each year thereafter.

Annual Environmental Report Content	Items to be Addressed in Establishing the Schedule of Objectives & Targets
Emissions to atmosphere summary. Emissions to water summary. Waste management report. Resource consumption summary. Complaints summary. Schedule of Environmental Objectives and Targets Environmental management programme - proposal Environmental management programme - report Pollution emission register - proposal Pollution emission register - report Report on List I & II substance reductions Noise monitoring report Tank and pipeline testing and inspection report Reported incidents summary	List I & II substance reductions Reduction in the number of emission points to air Reduction in noise emissions from the site Substitution of substances for less harmful ones Reduction/elimination of cadmium in emissions

Once-off Reports:

Report	Report Submission Date
Test Programme as per Conditions 5.2 & 5.3	Within three months of completion of the test programme.
Programme for public information	Within six months of the date of grant of licence.
Fire-water retention study	Within six months of the date of grant of licence.
Surface Water Monitoring Points	Within one month of the date of grant of licence.
Bund integrity assessment	Within three months of the date of grant of licence.
Pollution emission register proposal	Within six months of the date of grant of licence.
Schedule of Environmental Objectives and Targets	Within four months of the date of grant of licence.
Environmental management programme proposal.	Six months from the date of grant of licence.



Signed on behalf of the Agency

Iain Maclean

Director/Authorised Person
Dated this 31st day of August, 1999