



Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

INTEGRATED POLLUTION CONTROL PROPOSED DETERMINATION

Licence Register Number:	332
Applicant:	Randstone Limited t/a Stonearch Branch Randstone Limited
Location of Activity:	Abbeyleix Co. Laois

Table of Contents

	Page No.
Glossary	
Reasons for the decision.....	3
Activities	
Licensed.....	4
Condition 1. Scope.....	4
Condition 2. Management of the Activity	4
Condition 3. Interpretation.....	6
Condition 4. Notification	7
Condition 5. Emissions to Atmosphere	8
Condition 6. Emissions to Sewer	9
Condition 7. Waste Management.....	10
Condition 8. Noise	12
Condition 9. Non-Process Water	12
Condition 10. Monitoring	14
Condition 11. Recording and Reporting to Agency.....	15
Condition 12. Emergency Response	16
Condition 13. Financial Provisions.....	17
<i>Schedule 1(i) Emissions to Atmosphere</i>	<i>18</i>
<i>Schedule 1(ii) Emissions to Atmosphere: Abatement/Treatment Control</i>	<i>19</i>
<i>Schedule 1(iii) Monitoring of Emissions to Atmosphere</i>	<i>20</i>
<i>Schedule 2(i) Emissions to Sewer</i>	<i>21</i>
<i>Schedule 2(ii) Effluent Treatment Control.....</i>	<i>21</i>
<i>Schedule 2(iii) Monitoring of Emissions to Sewer.....</i>	<i>22</i>
<i>Schedule 3(i) Hazardous Wastes for Disposal/Recovery.....</i>	<i>22</i>
<i>Schedule 3(ii) Other Wastes for Disposal/Recovery.....</i>	<i>23</i>
<i>Schedule 3(iii) Waste Analysis.....</i>	<i>23</i>
<i>Schedule 3(iv) Buffer Zones for Landspreading of Nitrogenous Waste.</i>	<i>24</i>
<i>Schedule 3(v) Code of Practice for Landspreading of Nitrogenous Waste</i>	<i>24</i>
<i>Schedule 3(vi) Lands where Landspreading of Nitrogenous Wastes from this Facility are Excluded</i>	
.....	24
<i>Schedule 4(i) Noise.....</i>	<i>26</i>
<i>Schedule 5 (i) Surface Water Discharge Monitoring.....</i>	<i>26</i>
<i>Schedule 5(ii) Ambient Surface Water Monitoring.....</i>	<i>26</i>
<i>Schedule 5(iii) Ambient Groundwater Monitoring</i>	<i>27</i>
<i>Schedule 5(iv) Ambient Soil Monitoring</i>	<i>27</i>
<i>Schedule 6(i) Recording and Reporting to the Agency.....</i>	<i>27</i>

Glossary of Terms

The Agency	Environmental Protection Agency.
The Licensee	Randstone Limited t/a Stonearch Branch Randstone Limited, Abbeyleix, Co. Laois.
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.
Biennially	Once every two years.
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)
GC/MS	Gas Chromatography/ Mass Spectroscopy
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	Laois County Council.
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.
ppm	Parts per million.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Sanitary Authority	Laois 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 particular, the Agency has noted and given consideration to the following:

1. Assessment of the impact of air and sewer emissions from this facility.
2. Spreading of Archgro.
3. Submissions received from Mr Michael Lalor, Mr John Cregan and Mr Michael Nolan all of Sweetview Abbeyleix Co. Laois.

Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act, 1992, the Agency proposes to grant this Integrated Pollution Control licence to: Randstone Limited t/a Stonearch Branch Randstone Limited, Abbeyleix, Co. Laois

under Section 83(1) of the said Act to carry on the following activity

:- The manufacture of vitamins involving the use of heavy metals.

at Abbeyleix, Co. Laois, subject to the following Conditions (13 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 significance shall 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 enactments or regulations.
- 1.4 Any reference in this licence to 'site' shall mean the plan area edged in green as part of Attachment 2 in 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 Continuous Monitoring:

- (i) No 24 hour mean value shall exceed the emission limit value.
- (ii) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
- (iii) No 30 minute mean value shall exceed twice the emission limit value.

3.1.2 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) 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.
- 3.3.2 Non-Continuous Monitoring:
- (i) No pH value shall deviate from the specified range.
- 3.4 Noise
- 3.4.1 Noise from the activity shall not give rise to sound pressure levels (Leq,30min) measured at the specified noise sensitive locations 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 malfunction or breakdown of control equipment or monitoring equipment set out in;

Schedule 1(ii) Emissions to Atmosphere: Abatement/Treatment Control

which is likely to lead to loss of control of the abatement system.

4.1.4 Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, 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 Local/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 Southern Regional Fisheries Board as soon as practicable after such an incident.

4.6 In the event of any incident, as set out in Condition 4.1.4 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 All equipment, including backup equipment, specified in of this licence shall be provided on-site. All treatment/abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the information submitted in Table 12(ii) of the IPC licence application or as otherwise approved by the Agency under the Environmental Management Programme. The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures as approved by the Agency in *Schedule 1(ii) Emissions to Atmosphere Abatement/Treatment Control*.

5.3 Monitoring and analyses of each emission shall be carried out as specified in *Schedule 1(iii) 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.

- 5.4 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.
- 5.5 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.
- 5.6 The licensee shall carry out an odour audit of operations on-site, where required by the Agency. The methods, scope and reporting of this odour audit shall be agreed with the Agency.

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

Condition 6. Emissions to Sewer

- 6.1 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.
- 6.2 The equipment, including backup equipment, specified in *Schedule 2(ii) Effluent Treatment Control* of this licence, shall be provided on-site. 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.
- 6.3 Monitoring and analyses of each emission shall be carried out as specified in *Schedule 2(iii) Monitoring of Emissions to Sewer* of this licence. A report on the results of this monitoring shall be submitted to the Agency quarterly.
- 6.4 A summary report of emissions to sewer 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.
- 6.5 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.
- 6.6 No substance shall be present in such concentrations as would constitute a danger to sewer maintenance personnel, or sewer fabric or to the liberation of by-products which may be of environmental significance or interfere with the operations of a wastewater treatment works.
- 6.7 No substance shall be discharged in a manner, or at a concentration which, after initial dilution in the receiving waters to which the Sanitary Authority sewage is discharged, causes tainting of fish or shellfish.
- 6.8 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.
- 6.9 No emission to sewer shall take place which gives rise to any reaction within the sewer or to the liberation of by-products which may be of environmental significance.

- 6.10 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.
- 6.11 A log detailing the usage of all cooling water and boiler water treatment chemicals shall be kept by the licensee and submitted to the Sanitary Authority on an annual basis.
- 6.12 Any surface water arising from areas where barrels or containers are stored or washed shall be discharged to a sump. This effluent may be discharged to the sewer if it does not exceed the emission limit values specified in *Schedule 2(i) Emissions to Sewer*.

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

Condition 7. Waste Management

- 7.1 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.
- 7.2 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.
- 7.3 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule 3(iii) Waste Analysis*.
- 7.4 The licensee shall dispose of Menadione Tars, Tannesco Tars, Green River Tars, Menadione Mother Liquor, Cr Solids, Sludge for Yellow Tanks and MSB MLII Organic Waste, stockpiled on-site [as outlined in IPC Licence Application Table 17A(i)], within three months of date of grant of licence.
- 7.5 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:
- 7.5.1 The names of the agent and transporter of the waste.
 - 7.5.2 The name of the persons responsible for the ultimate disposal/recovery of the waste.
 - 7.5.3 The ultimate destination of the waste.
 - 7.5.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
 - 7.5.5 The results of any analyses required under *Schedule 3(iii) Waste Analysis*.
 - 7.5.6 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.

- 7.5.7 Details of any rejected consignments.
- 7.6 Where wastes are destined for landspreading the following conditions apply:
- 7.6.1 Waste destined for landspreading shall be analysed in accordance with *Schedule 3 (iii) Waste Analysis* of this licence.
- 7.6.2 All contractors and agents undertaking landspreading must be as outlined in the IPC licence application. Alterations to this must be agreed in writing and in advance with the Agency.
- 7.6.3 All lands where waste from the licensed activity is to be landspread must be as outlined in the IPC licence application. Alterations to this landbank must be agreed in writing and in advance with the Agency.
- 7.6.4 All landspreading activities shall be undertaken in accordance with a Nutrient Management Plan. The plan shall address a one year period as a minimum. The plan shall be prepared to the satisfaction of the Agency. The plan shall be reviewed annually and amendments thereto notified to the Agency before the First of February of each year.
- 7.6.5 The licensee shall ensure that all landspreading operations off-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.
- 7.6.6 All landspreading activities shall be carried out in such a manner as to avoid contamination of surface waters and groundwaters.
- 7.6.7 Landspreading shall be carried out in accordance with *Schedule 3(iv) Buffer Zones for Landspreading of Nitrogenous Waste*, and *Schedule 3(v) Code of Practice for Landspreading of Nitrogenous Waste*.
- 7.6.8 The licensee shall, within three months of date of grant of licence, submit a proposal to the Agency for the location of ambient groundwater and surface water sampling locations within the area used for landspreading. Upon agreement these samples shall be analysed in accordance with *Schedule 5(ii) Ambient Surface Water Monitoring* and *Schedule 5(iii) Ambient Ground Water Monitoring*.
- 7.7 A nitrogenous waste (Archgro) register shall be maintained on site and shall be available for inspection by authorised personnel of the Agency at all reasonable times. This register shall include details of the following: the results of any analysis required under *Schedule 3(iii) Waste Analysis*, date of spreading, contractor/agent spreading nitrogenous waste, weather conditions at the time and weather forecast for subsequent 48 hours, nitrogen requirements for individual fields/plots, volumes of nitrogenous waste applied to individual fields/plots, Chromium load applied to individual fields/plots. Summary details from the nitrogenous waste register should be reported to the Agency annually as part of the AER.
- 7.8 The licensee shall complete the Chromium sward retention study, as outlined in report to the Agency of the 30/11/98. This shall be submitted to the Agency as part of the Nutrient Management Plan, as per *Schedule 6(i) Recording and Reporting to the Agency - Once-off reports*.
- 7.9 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 8. Noise

- 8.1 Emissions shall not exceed the limit value specified in *Schedule 4(i) Noise*, subject to Condition 3 of this licence.
- 8.2 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.
- 8.3 Activities on-site shall not give rise to noise levels off-site, at noise sensitive locations, as specified in *Schedule 4(i) Noise* which exceed the following sound pressure limits (Leq, 30min) subject to Condition 3 of this licence:
- 8.3.1 Daytime: 55 dB(A)
- 8.3.2 Night-time: 45 dB(A).
- 8.4 There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise sensitive location.

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

Condition 9. Non-Process Water

- 9.1 Surface water
- 9.1.1 A visual examination of the surface water discharge shall be carried out daily. A log of such inspections shall be maintained.
- 9.1.2 The licensee shall monitor surface water discharges in accordance with *Schedule 5 (i) Surface Water Discharge Monitoring* of this licence. 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.
- 9.1.3 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.
- 9.2 Firewater Retention.
- 9.2.1 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.

- 9.2.2 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.
- 9.2.3 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 9.2.1 and 9.2.2 above.

9.3 Groundwater

- 9.3.1 The licensee shall maintain groundwater monitoring wells at the following locations:
- (i) GW 1 (AGW3 in IPCL Application)
 - (ii) GW 2 (AGW4 in IPCL Application)
 - (iii) GW 3 (AGW5 in IPCL Application)
 - (iv) GW 4 (AGW6 in IPCL Application)
 - (v) GW 5 (AGW7 in IPCL Application)
- as outlined in the IPC Licence Application (Monitoring Wells, Attachment 15C).
- 9.3.2 All groundwater monitoring points shall be included in the site's maintenance programme.
- 9.3.5 Groundwater monitoring points GW1 to GW5 shall be sampled and analysed in accordance with *Schedule 5(iii) Ambient Groundwater Monitoring* of this licence. A report of such results shall be submitted annually as part of the AER.

9.4 Facilities for the Protection of Groundwater and Surface Water

- 9.4.1 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.
- 9.4.2 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.
- 9.4.3 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.

- 9.4.4 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.
- 9.4.5 An inspection for leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be carried out weekly. A log of such inspections shall be maintained.
- 9.4.6 All flanges and valves on over-ground pipes used to transport materials other than uncontaminated water, where no permanent provision for containment of leaks is provided, shall be subject to weekly visual inspection or otherwise monitored for leaks to the satisfaction of the Agency. All such inspections shall be recorded in a log which shall be available for inspection by Agency.
- 9.4.7 The provision of a catchment system to collect any leaks from flanges and valves of all over ground pipes used to transport material other than water shall be examined. This shall be incorporated into a schedule of objectives and targets for the reduction in fugitive emissions set out in Condition 2.2 of this licence.
- 9.4.8 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 10. Monitoring

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

Schedule 1(ii): Emissions to Atmosphere: Abatement/Treatment Control

Schedule 1(iii): Monitoring of Emissions to Atmosphere

Schedule 2(ii): Effluent Treatment Control

Schedule 2(iii): Monitoring of Emissions to Sewer

Schedule 3(iii): Waste Analysis

Schedule 4(i): Noise

Schedule 5(i): Surface Water Discharge Monitoring

Schedule 5(ii): Ambient Surface Water Monitoring

Schedule 5(iii): Ambient Ground Water Monitoring

Schedule 5(iv): Ambient Soil Monitoring

of this licence.

- 10.2 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.

- 10.3 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.
- 10.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 10.5 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.
- 10.6 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.
- 10.7 The licensee shall provide safe and permanent access to the following sampling and monitoring points:
- 10.7.1 Final effluent as discharged from the site.
 - 10.7.2 Emission to atmosphere sampling points.
 - 10.7.3 Noise sources on-site.
 - 10.7.4 Waste storage areas on-site.
 - 10.7.5 Surface water discharge points.
 - 10.7.6 On-site ground-water monitoring wells.

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

- 10.8 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 11. Recording and Reporting to Agency

- 11.1 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.
- 11.2 The licensee shall record all incidents which affect the normal operation of the activity and which may create an environmental risk.
- 11.3 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.

- 11.4 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.
- 11.5 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.
- 11.6 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.
- 11.7 All reports shall be certified accurate and representative by the licensee's Plant Manager or other senior officer designated by the Plant Manager.
- 11.8 All written procedures controlling operations affecting this licence shall be available on-site for inspection by the Agency at all reasonable times.
- 11.9 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 12. Emergency Response

- 12.1 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 13. Financial Provisions

13.1 Agency Charges

13.1.1 The licensee shall pay to the Agency a minimum annual contribution of £6,374, 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 .

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.

Schedule 1(i) Emissions to Atmosphere

Emission Point Reference No.:	A2-1 (Acetic acid scrubber on spray dryer)	
Location :	Roof of spray dryer area.	
Volume to be emitted:	Maximum in any one day :	420,000 m ³
	Maximum rate per hour :	17,500 m ³
Minimum discharge height:	12 m above ground	

Parameter	Emission Limit Value
Acetic Acid	25mg/m ³
Total Chromium	5 mg/m ³

Emission Point Reference No.:	A2-2 (Acid neutralisation vent)	
Location :	Beside water softener plant.	
Volume to be emitted:	Maximum in any one day :	76,800 m ³
	Maximum rate per hour :	3,200 m ³
Minimum discharge height:	7.2 m above ground	

Parameter	Emission Limit Value
Sulphur oxides (as SO ₂)	300 mg/m ³
Ammonia	200mg/ m ³

Emission Point Reference No.:	A3-2 (New factory general extraction)	
Location :	Roof of new factory.	
Volume to be emitted:	Maximum in any one day :	18,000 m ³
	Maximum rate per hour :	750 m ³
Minimum discharge height:	6 m above ground	

Parameter	Emission Limit Value	
	Until 12/9/99	From 13/9/99
Acetic Acid	200mg/ m ³	100mg/ m ³



Schedule 1(ii) Emissions to Atmosphere: Abatement/Treatment Control

Emission Point Reference No.: A2-1

Description of Treatment: Acetic acid scrubber on spray dryer

Monitoring :

Control Parameter	Monitoring to be Carried Out	Monitoring Equipment	Backup equipment
pH	Continuous	pH probe	Spare probe
Acetic acid	Continuous	On-line analyser	Appropriate spares
CR (VI) in liquid feed	Per batch	Colourimetric meter	Appropriate spares
Redox potential	Per batch	Redox probe	Spare probe

Equipment:

Control Parameter	Equipment	Backup equipment
pH	Caustic dosing pump (diaphragm pump)	Spare pump.

Emission Point Reference No.: A2-2

Description of Treatment: Acid neutralisation vent

Monitoring :

Control Parameter	Monitoring to be Carried Out	Monitoring Equipment	Backup equipment
pH	Continuous	pH probe	Spare probe

Equipment:

Control Parameter	Equipment	Backup equipment
pH	Caustic dosing pump (diaphragm pump)	Spare pump.



Schedule 1(iii) Monitoring of Emissions to Atmosphere

Emission Point Reference No.: A2-1

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Quarterly	ISO 9096:1992(e) (Differential pressure meter)
Acetic Acid	Continuous	Continuous Procal Acetic Acid analyser
Acetic Acid	Quarterly	GC/FID
Total Chromium	Quarterly	AA/ICP
Chromium (VI) in liquid feed	Per batch	Colourimetric Method

Emission Point Reference No.: A2-2

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Quarterly	ISO 9096:1992(e) (Differential pressure meter)
Sulphur Oxides (as SO ₂)	Quarterly	Flue Gas Analyser
Ammonia	Quarterly	Flow Injection Analysis

Emission Point Reference No.: A2-3

Parameter	Monitoring Frequency	Analysis Method/Technique
Ammonia	Annually (During filling)	Flow Injection Analysis

Emission Point Reference No.: A3-1

Parameter	Monitoring Frequency	Analysis Method/Technique
Sulphur Oxides (as SO ₂)	Annually	Flue Gas Analyser

Emission Point Reference No.: A3-2

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Quarterly	ISO 9096:1992(e) (Differential pressure meter)
Acetic Acid	Quarterly	GC/FID
Total Chromium	Annually	AA/ICP



Schedule 2(i) Emissions to Sewer

Emission Point Reference No.: SE-1

Name of Receiving Waters: Abbeyleix Town Sewer.

Volume to be emitted: Maximum in any one day : 13 m³
 Maximum rate per week : 39 m³

Parameter	Emission Limit Value
pH	6-9

Schedule 2(ii) Effluent Treatment Control

Emission Point Reference No.: SE-1

Description of Treatment: pH balancing

Monitoring :

Monitoring to be Carried Out	Monitoring Frequency	Monitoring Equipment/Method
pH	Per batch	pH meter
Flow	Continuous	Flow meter

Equipment:

Control Parameter	Equipment	Backup equipment
pH	pH probe	Spares held on site

Schedule 2(iii) Monitoring of Emissions to Sewer

Emission Point Reference No.: SE-1

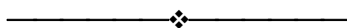
Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Per batch	pH probe
Total Chromium	Bi-annually	Standard Methods



Schedule 3(i) Hazardous Wastes for Disposal/Recovery

Waste Materials	Further Treatment, Recovery/Recycling On-Site ^{Note 1}	On-Site Reuse ^{Note 1}	Method of Disposal/Recovery ^{Note 2}
Menadione Mother Liquid 1	None	None	Agreed hazardous waste disposal contractor.
Menadione Mother Liquid 2	None	None	Agreed hazardous waste disposal contractor.
Butanol/Water solution	None	None	Agreed hazardous waste disposal contractor.
Tannesco Tar solids	None	None	Agreed hazardous waste disposal contractor.
Utilities Waste Oils	None	None	Agreed hazardous waste recovery contractor.
Stockpiled Waste ^{Note 3}	None	None	Agreed hazardous waste disposal contractor.
Archgro Solids	None	None	Agreed hazardous waste disposal contractor.
Other ^{Note 4}	None	None	

- 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 such cases where a previously agreed waste contractor is proven 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: This includes Menadione Tars, Tannesco Tars, Green River Tars, Menadione Mother Liquor, Cr Solids, Sludge for Yellow Tanks and MSB MLII Organic Waste outlined in Table 17 A(i) of IPC licence application. Time frame for disposal of these wastes is as per Condition 7.4
- Note 4: 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 :}
Nitrogenous waste liquid (Archgro).	Decanting to remove solids.	-	Landspreading.
Wooden pallets	None	None	Agreed disposal contractor
Plastic and paper	None	None	Agreed disposal contractor
Protective clothing	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 such cases where a previously agreed waste contractor is proven not to exercise due care in respect of the transport and disposal of the licensees 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 3(iii) Waste Analysis

Waste Class	Frequency	Parameter	Method
Menadione Mother Liquid 1	Annually	%Acetic Acid %IPA %Water	Gas chromatography Gas chromatography Standard method
Menadione Mother Liquid 2	Annually	%Acetic Acid %IPA %Water	Gas chromatography Gas chromatography Standard method
Butanol/Water solution	Annually	%Butanol %IPA %Water	Gas chromatography Gas chromatography Standard method
Tannesco Tar solids	Annually	Total Cr	AA/ICP
Nitrogenous waste (Archgro) Solids	Annually	Total Cr	AA/ICP
Nitrogenous waste (Archgro) Liquid	Bi-annually	%Dry Matter and Total N	Standard method.
	Quarterly	Total Cr	AA/ICP
	Quarterly	Cr(VI)	AA/ICP
Other ^{Note 1}			

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

Schedule 3(iv) Buffer Zones for Landspreading of Nitrogenous Waste.

No nitrogenous waste shall be spread within the following buffer zones:

Area	Buffer zone (m)
Sensitive buildings (hospitals, schools and churches)	200
Dwelling houses	100
Karst features	30
Lakes and main river channels	20
Small watercourses ^{Note1}	10
Public Roads ^{Note 1}	10
Domestic wells ^{Note 1}	50
Public water supplies ^{Note1, Note 2}	50 to 300

Note 1: The above distances to be increased if the gradient is greater than 6% (1:17).

Note 2: The appropriate distance depends on vulnerability and groundwater flow direction.

Schedule 3(v) Code of Practice for Landspreading of Nitrogenous Waste^{Note 1}

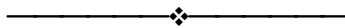
Spreading shall not take place:
<ul style="list-style-type: none"> • On wet or waterlogged ground • On frozen or snow covered ground • On exposed bedrock • Where surface gradients are excessive (preferably less than 18% (1:5)) • On fields that display cracks over pipe or mole drainage systems • During November to February inclusive except with agreement by the Agency • Outside daylight hours
Loadings:
<ul style="list-style-type: none"> • Maximum hydraulic loading of Nitrogenous Waste spread shall be 2.5m³/ha
Nitrogenous Waste application shall be in accordance with the following guidelines:
<ul style="list-style-type: none"> • Landspreading on lands with extreme groundwater vulnerability ratings ^{Note 2} would be considered Not Generally Acceptable. • Nitrogenous Waste shall be spread using a bandspreader. • Nitrogenous Waste should preferably be spread on tillage or re-seeded lands. • No application when the risk of causing odour nuisance to the public is greatest e.g. Sundays or public holidays • No application during meteorological conditions which increase the risk of odour nuisance. • No application where significant rain is forecast within 48 hours

Note 1: This Code of Practice may be amended by the Agency as further environmental information becomes available.

Note 2: As defined in D Daly, W P Warren (1997) Mapping Groundwater Vulnerability - The Irish Perspective, Geological Society London, Special Publication (in press).

Schedule 3(vi) Lands where Landspreading of Nitrogenous Wastes from this Facility are Excluded

Location
Land areas identified in IPC Licence Application labelled: <ul style="list-style-type: none"> • Landowner Code 044. Emission point code (field plots) 5, 6, 7 and 8.



Schedule 4(i) Noise

Noise Sensitive Locations

Location Reference ^{Note 1}	Description	Monitoring frequency
S1	Private dwelling	Annually
S2	Private dwelling	Annually
S3	Schoolhouse.	Annually
Other ^{Note 2}	-	-

Note 1: As defined in IPC Licence Application Table 16B (ii).

Note 2: Any other NSL which the Agency deems appropriate



Schedule 5 (i) Surface Water Discharge Monitoring

Emission Point Reference No's: SW1 and SW2

Parameter	Monitoring Frequency	Analysis Method/Technique
Visual Inspection	Daily	Not Applicable
pH	Weekly	pH electrode/meter
Total Chromium	Weekly	Standard Method
COD	Weekly	Standard Method

Schedule 5(ii) Ambient Surface Water Monitoring

Monitoring Point Reference No's. : ^{Note 1} Number of sites within landspreading areas to be agreed with the Agency.

Parameter	Monitoring Frequency	Analysis Method/Technique
BOD	Annually ^{Note 2}	Standard Method
Total Ammonia	Annually ^{Note 2}	Standard Method
Total Nitrogen	Annually ^{Note 2}	Standard Method
Total Phosphorus	Annually ^{Note 2}	Standard Method

Note 1: Additional monitoring points may be necessary with amendments in spreadlands.

Note 2: Monitoring shall be carried out at agreed points, within one month subsequent to landspreading.



Schedule 5(iii) Ambient Groundwater Monitoring

Emission Point Reference No's: GW1, GW2, GW3, GW4 and GW5. (On-Site)

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Quarterly	pH electrode/meter
COD	Quarterly	Standard Method
Conductivity	Quarterly	Standard Method
Total Chromium	Quarterly	Standard Method

Emission Point Reference No's ^{Note 1}: Number of sites to be agreed with the Agency. (Landspreading areas.)

Parameter	Monitoring Frequency	Analysis Method/Technique
Conductivity	Annually	Standard Method
Nitrate	Annually	Standard Method
Total Chromium	Annually	Standard Method

Note 1: Additional monitoring points may be necessary with amendments to the spreadlands.

Schedule 5(iv) Ambient Soil Monitoring

Monitoring Point Reference No's ^{Note 1}: Number of sites within landspreading areas to be agreed with the Agency.

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Chromium	Annually	Standard Method

Note 1: Additional monitoring points may be necessary with amendments to the spreadlands



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

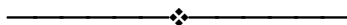
Reports are required to be forwarded as set out below:

Recurring Reports:

Report	Reporting Frequency	Report Submission Date
Monitoring of emissions to atmosphere	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of emissions to sewer	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of emissions surface water	Quarterly	Ten days after end of the quarter being reported on.
Nutrient Management Plan	Annually	First of February each year.
Ambient surface water monitoring	Annually	First of February each year, as part of the Nutrient Management Plan.
Ambient groundwater monitoring	Annually	First of February each year, as part of the Nutrient Management Plan.
Ambient soil monitoring	Annually	First of February each year, as part of the Nutrient Management Plan.
Noise survey - Proposal	Annually	One month prior to survey.
Noise survey - Report	Annually	Six months from date of grant of licence, and annually as part of the AER thereafter.
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
Emissions to atmosphere summary.
Emissions to sewer summary.
Waste management report.
Nutrient Management Plan.
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
Groundwater monitoring summary
Tank and pipeline testing and inspection report
Reported incidents summary

Items to be Addressed in Establishing the Schedule of Objectives & Targets
List I & II substance reductions
Reduction in the number of emission points to air
Reduction in noise emissions from the site
Investigation and reduction of odour emissions arising from processes on site.
Reduction in Chromium content of Nitrogenous Waste (Archgro).
Elimination of Chromium emissions to surface water.



Once-off Reports:

Report	Report Submission Date
Programme for public information.	Within six months of the date of grant of licence.
Odour audit of operations on-site	Where required by the Agency.
Study of Chromium retention on sward– Final report	First of February 2000, as part of the NMP.
Fire-water retention study.	Within six months of the date of grant of licence.
Bund integrity assessment.	Within three months of the date of grant of licence.
Proposal for location of ambient groundwater and surface water sampling locations.	Within three months of the date of grant of licence.
Proposal for the provision of suitable storage for Archtan held on-site.	Within six 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

Larry Kavanagh

Authorised Person

Dated this 31st day of March 1999