



Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

INTEGRATED POLLUTION CONTROL PROPOSED DETERMINATION

Licence Register Number: 678

Applicant: AHP Manufacturing B.V.
t/a Wyeth Nutritionals Ireland

Location of Activity: Askeaton
County Limerick

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Glossary of Terms

The Agency	Environmental Protection Agency.
The Licensee	AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland, Askeaton, County Limerick.
AER	Annual Environmental Report.
Agreement	Agreement in writing.
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).
DO	Dissolved Oxygen.
EMP	Environmental Management Programme.
EPA	Environmental Protection Agency
EWC	European Waste Catalogue (94/3/EEC as amended)
Fortnightly	At least 20 measurements in a calendar year with no more than one measurement in any one week.
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	Limerick 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.
Regional Fisheries Board	Shannon Regional Fisheries Board
Sanitary Authority	Limerick 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) 20th Ed. 1998, American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or, an alternative method as may be agreed in writing by the Agency.
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.

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:

AHP Manufacturing B.A. t/a Wyeth Nutritionals Ireland, Askeaton, County Limerick,

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

: - the manufacture of dairy products where the processing capacity exceeds 50 million gallons of milk equivalents per year,

and

:- the burning of any fuel in a boiler or furnace with a nominal heat output exceeding 50 MW,

at Askeaton, County Limerick, subject to the following fifteen Conditions, 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 (IPC) 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) 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
- (b) 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 red and labelled "Site Plan (Drawing No. C002266-001RevA)" in the IPC licence application.
- 1.5 This licence has been granted in substitution for IPC licence granted to the licensee on 27th October, 2000 and bearing Register No.: 395. The previous IPC licence (Reg. No. 395) is replaced by this licence.

Reason: To clarify the scope of this licence.

Condition 2. Management of the Activity

- 2.1 The licensee shall 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 reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (See also Condition 2.9).

2.3 Environmental Management Programme (EMP)

2.3.1 The EMP shall be 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 by 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 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 maintain 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 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 maintain a programme to ensure that members of the public can obtain information concerning the environmental performance of the licensee at all reasonable times.

2.9.2 For each full calendar year from the date of grant of this licence, the licensee shall submit to the Agency, by the 31st March of the following year, an AER which shall be to the satisfaction of the Agency. This report shall include as a minimum the information specified in *Schedule 5(i) Recording and 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) For all other parameters, no 30 minute mean value shall exceed the emission limit value.

3.2 The concentration and volume flow 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.

3.3 Emission limit values for emissions to waters 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,T) 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 of environmental significance 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, and Schedule 2(ii) Effluent 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, summary details of the occurrence, and where available, the steps taken to minimise any emissions.
- 4.2 The licensee shall make a record of any incident as set out in Condition 4.1 above. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to; manage the incident, minimise wastes generated and the effect on the environment, and avoid

recurrence. The licensee shall as soon as practicable following incident notification, submit to the Agency the incident record.

- 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 case of any incident as set out in Condition 4.1.2 above which relates to discharges to water, the licensee shall notify the Shannon Regional Fisheries Board as soon as practicable after such an incident.
- 4.5 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.

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*, 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 *Schedule 1(ii) Emissions to Atmosphere: Abatement/Treatment Control* 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 12A(iv) of the IPC licence application or as otherwise approved by the Agency under the Environmental Management Programme.
- 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 an annual 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 Boilers shall normally be fired on natural gas unless otherwise agreed by 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 Water

- 6.1 No specified emission to water shall exceed the emission limit values set out in *Schedule 2(i) Emissions to Water* subject to Condition 3 of this licence. There shall be no other emissions to water 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 13A(iii) of the IPC licence application or as otherwise approved by the Agency under the EMP. All treatment/abatement and control equipment shall be functioning at all times when the activity is being carried on unless alternatives have been agreed in writing by the Agency.

- 6.3 Monitoring and analyses of each emission shall be carried out as specified in *Schedule 2(iii) Monitoring of Emissions to Water* of this licence. A report on the results of this monitoring shall be submitted to the Agency biannually.
- 6.4 A summary report of emissions to water 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 acute toxicity of the undiluted final effluent to at least four aquatic species from different trophic levels shall be determined by standardised and internationally accepted procedures and carried out by a competent laboratory. The name of the laboratory and the scope of testing to be undertaken shall be submitted, in writing, to the Agency, within three months of the date of grant of this licence. Once the testing laboratory and the scope of testing have been agreed by the Agency, the Agency shall decide when this testing is to be carried out and copies of the complete reports shall be submitted by the licensee to the Agency within six weeks of completion of the testing.
- 6.6 Having identified the most sensitive species outlined in Condition 6.5, subsequent compliance toxicity monitoring on the two most sensitive species shall be carried out by the laboratory identified in Condition 6.5 as per *Schedule 2(iii) Monitoring of Emissions to Water*. The Agency shall decide when this testing is to be carried out and copies of the complete reports shall be submitted by the licensee to the Agency within six weeks of completion of the testing.
- 6.7 No substance shall be discharged in a manner, or at a concentration which, following initial dilution, causes tainting of fish or shellfish.

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

Condition 7. Waste Management

- 7.1 Disposal or recovery of waste shall take place only as specified in *Schedule 3(i) Hazardous Wastes 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 be conveyed only by an authorised waste contractor. The waste shall be transported only from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 7.3 No amendment or variation in any agreed waste classification or consignment or haulage or disposal or recovery arrangements shall be made without the prior written agreement of the Agency.
- 7.4 The licensee shall ensure that waste transferred to another person is packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling. While awaiting collection, recovery or disposal all waste shall be

stored in designated areas protected, as may be appropriate, against spillage and leachate run-off. The waste is to be clearly labelled and appropriately segregated.

- 7.5 No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No.259/1993, as amended) shall be consigned for recovery without the prior agreement of the Agency.
- 7.6 Unless approved in writing by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 7.7 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:
- 7.7.1 The tonnages and EWC Code for the waste materials listed in *Schedule 3(i) Hazardous Wastes for Disposal/Recovery* and *Schedule 3(ii) Other Wastes for Disposal/Recovery*, sent off-site for disposal/recovery.
- 7.7.2 The names of the agent and carrier of the waste, and their permit details (to include issuing authority).
- 7.7.3 Details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit details and issuing authority.
- 7.7.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
- 7.7.5 Details of all wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
- 7.7.6 Details of any rejected consignments.
- 7.7.7 Details of any approved waste mixing as per Condition 7.6.

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 The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency. The licensee shall consult with the Agency on the timing of the survey. 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.
- 8.2 Activities on-site shall not give rise to noise levels off-site, at noise sensitive locations, which exceed the following sound pressure limits (Leq, 15 mins) subject to Condition 3 of this licence:
- 8.2.1 Daytime: 55 dB(A),

- 8.2.2 Night-time: 45 dB(A).
- 8.3 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 4(i) Surface Water Discharge Monitoring* of this licence. A report on the results of this monitoring shall be submitted to the Agency biannually 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 Groundwater
- 9.2.1 Groundwater monitoring points BH101, BH201, BH202, BH203, BH204 shall be sampled and analysed in accordance with *Schedule 4(ii) Groundwater Monitoring* of this licence. A report of such results shall be submitted annually as part of the AER.
- 9.3 Facilities for the Protection of Groundwater and Surface Water
- 9.3.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein. In addition, tank and drum storage areas shall, from the date of grant of licence, 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.
- 9.3.2 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.

- 9.3.3 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run - off.
- 9.3.4 All pump sumps or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or interceptors, shall be fitted with high liquid level alarms (or oil detectors as appropriate) from the date of grant of this licence.
- 9.3.5 The licensee shall undertake a programme of testing and inspection of active underground tanks and pipelines to ensure that all such structures are tested at least once every three years. A report on such tests shall be included in the AER.
- 9.3.6 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.
- 9.3.7 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. Energy Use

- 10.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The licensee shall consult with the Agency on the nature and extent of the audit and shall develop an audit programme to the satisfaction of the Agency. The audit programme shall be submitted to the Agency in writing at least one month before the audit is to be carried out. A copy of the audit report shall be available on-site for inspection by authorised persons of the Agency and a summary of the audit findings shall be submitted as part of the Annual Environmental Report. The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 10.2 The audit shall identify all opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2 above.

Reason: To provide for the efficient use of energy in all site operations.

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) 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 Water,*
- Schedule 4(i) Surface Water Discharge Monitoring,*

Schedule 4(ii) Groundwater Monitoring,

of this licence.

- 11.2 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.
- 11.3 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.
- 11.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 11.5 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.
- 11.6 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.
- 11.7 The licensee shall provide safe and permanent access to the following sampling and monitoring points:
- 11.7.1 Final effluent as discharged from the site.
 - 11.7.2 Emission to atmosphere sampling points.
 - 11.7.3 Noise sources on-site.
 - 11.7.4 Waste storage areas on-site.
 - 11.7.5 Surface waters discharge.
 - 11.7.6 On-site ground-water monitoring wells.
- and safe access to any other sampling and monitoring points required by the Agency.
- 11.8 The licensee shall operate a weather monitoring station on the site at a location agreed by the Agency, which records conditions of wind speed and wind direction.
- 11.9 The licensee shall maintain in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.

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 5(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 by the Agency following evaluation of test results.

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

Condition 13. Accidents and Emergency Response

- 13.1 The licensee shall, within six months of date of grant of this licence, ensure that a documented Accident Prevention Policy is in place which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment.
- 13.2 The licensee shall, within six months of 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.
- 13.3 The policy and procedure referred to in Conditions 13.1 and 13.2 shall be reviewed annually and up-dated as necessary. They shall be made available on-site for inspection by the Agency at all reasonable times.

Reason: To provide for the protection of the environment.

Condition 14. Residuals Management

- 14.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 14.2 Residuals Management Plan:
- 14.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement within six months of the date of grant of this licence.
- 14.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.
- 14.3 The Residuals Management Plan shall include as a minimum, the following:
- 14.3.1 A scope statement for the plan.
- 14.3.2 The criteria which define the successful decommissioning of the activity or part thereof, which ensures minimum impact to the environment.
- 14.3.3 A programme to achieve the stated criteria.
- 14.3.4 Where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan.
- 14.3.5 Details of costings for the plan and a statement as to how these costs will be underwritten.
- 14.4 A final validation report to include a certificate of completion for the residuals management plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

Reason: To make provision for the proper closure of the activity ensuring protection of the environment.

Condition 15. Financial Provisions

- 15.1 Agency Charges
- 15.1.1 The licensee shall pay to the Agency an annual contribution of €12,916, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, 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 first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December 2004, and shall be paid to the Agency within one month from the date of the

licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Environmental Protection Agency Act 1992, and all such payments shall be made within one month of the date upon which demanded by the Agency.

15.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs in regard to items not covered by the said annual contribution.

15.2 Environmental Liabilities

15.2.1 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment for the operation, which will address liabilities from past and present activities. A report on this assessment to be submitted to the Agency for agreement within twelve months of date of grant of this licence.

15.2.2 Within six months of agreement by the Agency under Condition 15.2.1, the licensee shall make financial provision in a form acceptable to the Agency to cover any liabilities incurred by the licensee. The amount of indemnity must always be capable of covering the liabilities identified in Condition 15.2.1.

15.2.3 The amount of indemnity, held under Condition 15.2.2 shall be reviewed and revised as necessary, but at least annually.

15.2.4 The licensee shall within two weeks of purchase, renewal or revision of the financial indemnity required under Condition 15.2.2, forward to the Agency written proof of such indemnity.

<p><i>Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.</i></p>
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Schedule 1(i) Emissions to Atmosphere

Emission Point Reference No.:	A1-1	
Location:	CHP Boiler Stack	
Volume to be emitted:	Maximum in any one day:	1,474,080 m ³
	Maximum rate per hour:	61,420 m ³
Minimum discharge height:	40 m above ground	

Parameter	Emission Limit Value
Nitrogen oxides as (NO ₂)	300 mg/m ³



Emission Point Reference No.:	A1-2, A1-4
Location:	Boilers 1, 3

Minimum discharge height: 40 m above ground

Parameter	Emission Limit Value (mg/m ³)	
	Until 31/12/2004	From 1/1/2005
Oxides of sulphur (as SO ₂)	1700	340 ^{Note 1}
Nitrogen oxides as (NO ₂)	750	115 ^{Note 2}
CO	150	115 ^{Note 1}
Smoke	<1(Ringelmann Shade)	-

Note 1: These emission limit values shall only apply when Gas Oil is in use as backup fuel.

Note 2: An emission limit value of 220 mg/m³ shall apply when Gas Oil is in use as backup fuel.



Emission Point Reference No.: A1-3
Location: Boiler 2

Minimum discharge height: 40 m above ground

Parameter	Emission Limit Value (mg/m ³)	
	Until 31/12/2004	From 1/1/2005
Oxides of sulphur (as SO ₂)	1700	340
Nitrogen oxides as (NO ₂)	750	220
CO	150	115
Smoke	<1(Ringelmann Shade)	-

Emission Point Reference No's.: Dryers A2-1, A2-2, A2-3, A2-4 and A2-6 and
 Agglomerator A2-5
Location: Production area

Minimum discharge height: 23 m above ground

Parameter	Emission Limit Value
Total Particulates	50 mg/m ³

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

Emission Point Reference No.: Dryer A2-2
Description of Treatment: Bag filtration

Monitoring:

Control Parameter	Monitoring to be Carried Out	Monitoring Equipment
Filter pressure drop	Monthly emission concentration	Manometer

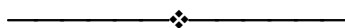
Equipment:

Control Parameter	Equipment	Backup equipment
Filter pressure drop	Bag filter	Spare bags

Schedule 1(iii) Monitoring of Emissions to Atmosphere

Emission Point Reference No.: A1-1 (and A1-2, A1-4 from 1/1/2005)

Parameter	Monitoring Frequency	Analysis Method/Technique
NOx	Biannually	Flue gas analyser



Emission Point Reference No.: A1-3 (and A1-2, A1-4 until 1/1/2005)

Parameter	Monitoring Frequency	Analysis Method/Technique
SOx	Biannually	Flue gas analyser
NOx	Biannually	Flue gas analyser
CO	Biannually	Flue gas analyser



Schedule 2(i) Emissions to Water

Emission Point Reference No.: SW1
Name of Receiving Waters: Deel estuary
Location: East of effluent treatment plant

Volume to be emitted: Maximum in any one day: 2,800 m³
 Maximum rate per hour: 126 m³

Parameter	Emission Limit Value	
	Mg/l	Kg/day
pH	6-9	
Toxicity	5 TU	
BOD	40	100
Suspended Solids	50	140
Total Nitrogen	15	42
Total Phosphorus (as P)	2	5.6
Oils, Fats and Greases	15	42
Ammonia (as N)	10	28



Schedule 2(ii) Effluent Treatment Control

Emission Point Reference No.: WS1

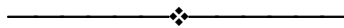
Description of Treatment: Biological sequencing batch reactor waste water treatment

Monitoring:

Monitoring to be Carried Out	Monitoring Frequency	Monitoring Equipment/Method
COD (Raw effluent)	Daily	Standard Methods
Phosphorus (Raw effluent)	Daily	Standard Methods
pH (ex Balance Tank)	Continuous	pH Meter/Recorder
SBR inflow	Continuous	Flow Meter/Recorder
Dissolved Oxygen (SBR)	Continuous	DO Meter/Recorder
Mixed Liquor Suspended Solids (SBR)	Continuous during react	MLSS Meter
SBR outflow	Continuous	Flow Meter/Recorder
Sludge Floc microscopy	Daily	Standard Methods

Equipment:

Control Parameter	Equipment	Backup Equipment
Fat and grease removal	Motor/belt	Spares held on site
Effluent (pH) Neutralisation	Acid/Caustic Dosing Pump	Spares held on site
Effluent Transfer	Pumps	Standby pumps and spares held on site
SBR Dissolved Oxygen	Air blowers	Spares held on site
	Fixed DO Meter	Portable DO Meter
MLSS	Sludge transfer pumps	Spares held on site
Sludge Dewatering	Filtration/dryer	Spares held on site



Schedule 2(iii) Monitoring of Emissions to Water

Emission Point Reference No.: SW1

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	On-line flow meter with recorder
pH	Continuous	pH electrode/meter and recorder
Chemical Oxygen Demand	Daily	Standard Method
Biochemical Oxygen Demand	Daily	Standard Method
Suspended Solids	Daily	Gravimetric
Nitrates (as N)	Daily	Standard Method
Ammonia (as N)	Daily	Standard Method
Total Phosphorus (as P)	Daily	Standard Method
Total Nitrogen (as N)	Weekly	Standard Method
Oils, fats & greases	Weekly	Standard Method
Toxicity ^{Note 1}	Annually ^{Note 1}	To be agreed by the Agency

Note 1: The number of toxic units (Tu) = 100/x hour EC/LC₅₀ in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.



Schedule 3(i) Hazardous Wastes for Disposal/Recovery

Waste Materials Note 1	Further Treatment, Recovery/Recycling On-Site Note 2	On-Site Reuse Note 2	Method of Disposal/Recovery Note 3
Waste Solvents	None	None	Agreed hazardous waste disposal contractor
Light tubes – crushed glass and Aluminium ends	None	None	Agreed hazardous waste recovery contractor
Light tubes – Mercury filers	None	None	Agreed hazardous waste disposal contractor
Waste Oils	None	None	Agreed hazardous waste recovery contractor
Batteries	None	None	Agreed hazardous waste recovery contractor
Electronic equipment	None	None	Agreed hazardous waste recovery contractor
Empty Lacquer drums	None	None	Agreed hazardous waste disposal contractor
Lab smalls	None	None	Agreed hazardous waste recovery contractor
COD vials	None	None	Agreed hazardous waste recovery contractor
Aerosols	None	None	Agreed hazardous waste disposal contractor
Miscellaneous once off hazardous material	None	None	Agreed hazardous waste disposal contractor
Medical waste - sharps	None	None	Agreed hazardous waste disposal contractor
Oily rags	None	None	Agreed hazardous waste recovery contractor
Oil interceptor waste	None	None	Agreed hazardous waste recovery contractor
Oil filters	None	None	Agreed hazardous waste recovery contractor
Degreaser filters	None	None	Agreed hazardous waste recovery contractor
Waste turbine oils	None	None	Agreed hazardous waste recovery contractor
Other Note 4			

Note 1: Refer also to waste classification, labelling and management obligations specified in Condition 7.

Note 2: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 3: The agreed Method and any amendment thereto, shall include details of anticipated waste volumes, classification, transport arrangements, as well as identification (including authorisations and appropriateness) of facility of final destination of disposal/recovery.

Note 4: No other hazardous waste shall be disposed of/recovered off-site or on site without prior notice to, and prior written agreement of the Agency.



Schedule 3(ii) Other Wastes for Disposal/Recovery

Waste Materials Note 1	Further Treatment, Recovery/Recycling On-Site Note 2	On-Site Reuse Note 2	Method of Disposal/Recovery Note 3
Organic sludge	None	None	Agreed recovery contractor
General waste	None	None	Agreed disposal contractor.
Organic oils	None	None	Agreed recovery contractor
Powder sweepings	None	None	Agreed disposal contractor.
R & D samples	None	None	Agreed disposal contractor.
Out of spec raw material and product sweepings	None	None	Agreed disposal contractor.
Cardboard	None	None	Agreed recovery contractor
Metallic packaging	None	None	Agreed recovery contractor
Empty oil drums	None	None	Agreed recovery contractor
Timber Pallets	None	None	Returned to supplier
Composite packaging – laminated foil	None	None	Agreed disposal contractor.
Plastic packaging	None	None	Agreed recovery contractor
Paper and cardboard packaging – white paper	None	None	Agreed recovery contractor
Printer cartridges and mobile phones	None	None	Agreed recovery contractor
Reject metal – raw material	None	None	Agreed recovery contractor
Product tailings	None	None	Reuse as animal feed
Construction waste material	None	None	Agreed disposal contractor.
Construction material containing asbestos	None	None	Agreed disposal contractor.
Glass bottles	None	None	Agreed recovery contractor
Other Note 4			

Note 1: Refer also to waste classification, labelling and management obligations specified in Condition 7.

Note 2: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 3: The agreed Method and any amendment thereto, shall include details of anticipated waste volumes, classification, transport arrangements, as well as identification (including authorisations and appropriateness) of facility of final destination of disposal/recovery.

Note 4: No other waste shall be disposed of/recovered off-site or on site without prior notice to, and prior written agreement of the Agency.



Schedule 4(i) Surface Water Discharge Monitoring

Parameter	Monitoring Frequency	Analysis Method/Technique
Visual Inspection	Daily	Sample and examine for colouration and odour
pH	Weekly	pH electrode/meter
BOD	Weekly	Standard Method
Total Ammonia	Weekly	Standard Method
Total Nitrogen	Weekly	Standard Method

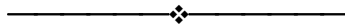


Schedule 4(ii) Groundwater Monitoring

Emission Point Reference No's.:

Bore-Holes BH101, BH201-204

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Biannually	pH electrode/meter
COD	Biannually	Standard Method
Major Anions	Biannually	Standard Method
Major Cations	Biannually	Standard Method



Schedule 5(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

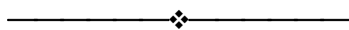
or Any other address as may be specified by the Agency

Reports are required to be forwarded as set out below:

Recurring Reports:

Report	Reporting Frequency	Report Submission Date
Monitoring of emissions to atmosphere	Annually	Ten days after end of the period being reported on.
Monitoring of emissions to water	Biannually	Ten days after end of the period being reported on.
Surface Water	Biannually	Ten days after 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 Environmental Report(AER)	Annually	Eighteen months from the date of grant of licence and each calendar year thereafter.

Annual Environmental Report Content
Emissions to atmosphere summary.
Emissions to water summary.
Waste management report.
Resource consumption summary.
Complaints summary.
Environmental management programme - proposal
Environmental management programme - report
Pollution emission register – proposal
Pollution emission register – report
Noise monitoring report
Schedule of Environmental Objectives and Targets
Energy efficiency audit report summary
Groundwater monitoring summary
Review of residuals management plan
Tank and pipeline testing and inspection report
Reported incidents summary



Once-off Reports:

Report	Report Submission Date
Toxicity monitoring programme as per condition 6.5	Within three months of the date of grant of licence.
Energy Audit Programme	Within eleven months of the date of grant of licence.
Environmental Liabilities Assessment Report	Within twelve months of the date of grant of licence.
Residuals Management Plan	Within six months of the date of grant of licence.
Bund integrity assessment.	Within three months from the date of grant of licence.

Signed on behalf of the Agency

Ray Cullinane

Authorised Person

Dated this 10th day of December 2003.