EP OPRA PROFILE - Installation
Maelor Foods Limited
Permit Application Ref PPN-00003

Complexity

Rules 1 and 2: Process and Activity Definitions

Description of Activity	Schedule 1 Ref	Rule 2 OPRA activity subdivision	Schedule 1 Description	Regulatory Complexity	Notes
Slaughterhouse	Section 6.8A(1)(b)	NA	Slaughtering animals at a plant with a carcass production capacity of more than 50 tonnes per day.	B	400,000 birds per week initially rising to 1 million per week subject to planning approval. Equates to on average approx. 272T carcass / day at 1 million birds / week.
Meat treatment & processing	Section 6.8A(1)(d)(i)	NA	Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed (where the weight of the finished product excludes packaging)- (i) only animal raw materials (other than milk only) with a finished product production capacity greater than 75 tonnes per day	B	Estimated capacity of 158T/day.
ETP	5.4 Part A(1)(a)(i)	NA	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day by biological treatment	A	ETP will treat around 1,200T up to 1,500T/day of wastewater so Rule 9 applies (>300 T/day)

None of the activities come under two or more descriptions in Schedule 1 of the EPR 2013 so no need to consider the most appropriate descriptions.

Rule 3. Operations in separate plants

At installations where scheduled activities are carried out in separate plants, a complexity score is required for each scheduled activity carried out in each plant. For plants with a small-scale production capacity or where the listed activities are intermediate stages in the overall production process, these can be aggregated into a single attribute. If it is a Chapter 4 activity Rule 4 may apply.

A plant is defined as equipment or a group of equipment which, when operated together, carries out the scheduled activity. However, for certain activities where there are threshold criteria within the Regulations, this threshold can be used to aggregate plant together.

Slaughtering, meat treatment and processing and effluent treatment are not carried out in separate processing lines so rule 3 does not apply.

Rule 4. Aggregation (chemical industry only)
Not applicable – no chemical sector activities.

Rule 5. Multi-product application or permit (MPP) (chemical industry only)
Not applicable – no chemical sector activities.

Rule 6. Scale
Not applicable – installation area is <50 hectares.

Rule 7. Multi-activity permits (seven or more activities)
This rule applies after all the preceding rules have been applied. The complexities are ordered in the spreadsheet. Band the first six activities as normal. List them in order, eg all band Es first, then band Ds, etc. Drop the band of the seventh and all subsequent activities each by one. For example, if the seventh activity is a band C, then it becomes a band B. However, where an activity is already a band A, it remains as A.

Not applicable – only 3 complexities.

Rule 8. Landfill only
Not applicable – no landfill activities.

Rule 9. Effluent treatment plants
A complexity band is not needed for effluent treatment plants in sections 5.3 A (1) a) (i),(ii), 5.4 A (1) (a) (i),(ii) or Section 5.4A (1) (b) (i) of Schedule 1 of the EPR (see Table 1A complexities look-up table) if all the following are met:
• the capacity of the plant is less than 300m^3 a day
• the operation of the plant is included in a permit covering one or more, other schedule 1 activities
• the other schedule 1 activity(ies) is NOT a specified waste management activity (SWMA).

Complexity applies - ETP can treat >300TPD.

Emissions

Air

2 small boilers, 556kWth input in aggregate. Technical data for the burner gives emissions of:

NOx <200mg/kWh
CO <40mg/kWh
Particulates 10mg/kWh
Sulphur dioxide 3.7mg/kWh

Annual NOx emissions
For 1 hour: 556kW x 200mg/kWh = 111200mg = 111.2g/hr = 2.67kg/day.

For 1 year: 365 x 2.67kg = 974.55kg.

Annual CO emissions
974.55kg x 0.2 = 194.91kg.

Annual particulate emissions
974.55kg x 0.05 = 48.73kg.

Annual SO_2 emissions

974.55kg x 0.0185 = 18.03kg.
These are well below the OPRA emission thresholds.

Odourous compounds from processing (via odour abatement unit – fugitive) may include ammonia and hydrogen sulphide. This will be a fugitive release and it is expected that any permit emission controls will either be via an odour management plan / boundary odour condition and / or odour units. These parameters are therefore not included in the OPRA air emissions.

Water

The discharge to River Dee from the effluent treatment plant includes the following parameters:

- BOD, ammonia and suspended solids are not applicable for OPRA emissions as they are addressed under OPRA location attribute.

- Temperature and pH are not mass release parameters for OPRA.

- Phosphate, Iron and Aluminium are not listed in OPRA so are not recorded. The EA OPRA Technical Advisor confirmed that no new substances have been added to OPRA.

So no emissions to water for OPRA purposes.

Land
No emissions to land within the installation.

Sewer
No emissions to sewer

Waste Output

We have no operational data on annual amounts of waste arisings so have estimated them based on information from similar processes in the sector. These figures can be reviewed against our operational installation data at the 1st OPRA review after permitting.

A similar effluent treatment plant at an animal by-products installation produces around 3,000TPA of dewatered sludge. The plant is around 50% of the capacity of the Maelor Foods' ETP so our sludge arisings may roughly be estimated at 6,000TPA.

Manure from the lairage will be spread to land. The amounts are unknown at the moment but will be added to the first OPRA review once operational. The amounts are not expected to be significant.

Our estimated arisings are:
6,000 TPA – Biodegradable non-hazardous waste for recovery (ETP Sludge + lairage manure)
<10TPA - Hazardous waste for disposal (light bulbs)
<10TPA - Hazardous waste for recovery (waste oils & oil contaminated cloths)
<100TPA - Biodegradable non-hazardous waste for recovery (wooden pallets, cardboard, paper)
<100TPA - Non-biodegradable non-hazardous waste for recovery (metal, glass, plastic)

All below OPRA thresholds except for sludge.

Waste Input

None

Emission Index - Waste – Band A

Location

1. **Human Occupation**

The company own the nearest two residential properties to the installation boundary which are within around 35 metres from the site entrance and around 65 metres from the main process building. The Environment Agency have confirmed that these must be taken into account for OPRA purposes.

Three other private properties on Pickhill Lane are >50m but <250m away from the site entrance.

2. **Habitats and Conservation Sites**

Searches were undertaken on Magic Maps and the following sites identified:

Habitats Directive sites within 1km (no emissions to air from the installation of any significance)
SAC (Wales) within 1km of the installation – River Dee and Bala Lake. The River Dee and Llyn Tegid, Special Area of Conservation (SAC) is designated for its Atlantic salmon and water plantain populations. See maps and search results (Appendix B, Figures 1 & 2)

CROW sites within 2km of the installation
The River Dee is also a designated SSSI within 1km of the installation. See maps and search results (Appendix B, Figures 3 & 4)

Impact assessments required for these sites.

Once the impact on these sites has been assessed during permit application determination NRW can review the answers to this question and revise the OPRA profile accordingly.

3. **Aquifers**

The installation is on a primary aquifer (Source Protection Zone III, Total Catchment). See map (Appendix B – Figure 5)

4. **Receiving Water Quality**

The effluent treatment plant will discharge to the River Dee approx. 120m southwest of the installation. The Dee is a Special Area of Conservation (SAC), designated for its Atlantic salmon and water plantain populations.

The 2009 WQ data shows the river to be Class A for both chemical and biological quality at the monitoring location upstream and downstream of the installation. See search results (Appendix B – Figure 6)

5. Direct storm water run off

Site drainage from hard standings where oils could be spilt will pass through oil interceptors before discharge to the surface water culvert running southeast which joins the land drainage system flowing northeast, then east before joining the River Dee further downstream.

6. Air Quality Protection Zones (AQMZ)

The installation is not within an AQMZ.

7. Flooding

The installation is just outside a designated flood plain. The point of discharge to the River Dee is within the flood plain. See map (Appendix B – Figure 7)

Location Attribute Score: 14, Band D

Operator Performance

Operations and Maintenance

1. Are there documented operating procedures for operations that may have an adverse impact on the environment? *There will be – by commissioning date.*

2. Is there a defined procedure for identifying, reviewing and prioritising items of plant for which a preventative maintenance regime is appropriate? *There will be – by commissioning date.*

3. Are there documented procedures for monitoring emissions or impacts? *There will be – by commissioning date.*

4. Is there a preventative maintenance programme for those items of plant whose failure could lead to impact on the environment? *There will be – by commissioning date.*

5. Does the preventative maintenance programme include regular checks and formal inspections of 'static' items such as tanks, pipework, retaining walls, bunds and ducts? *It will do – by commissioning date.*

6. Do the operations and maintenance systems include auditing environmental performance? *They will do – by commissioning date.*

7. Are the reports, results and recommendations arising from audits made available to senior management on a regular basis? *They will be – by commissioning date.*

8. In the last two years, has there been any notifiable incident or release for which lack of maintenance was a contributory cause? *No*

9. In the last two years, has there been any notifiable incident or release for which the root cause could not be identified? *No*

Competence and Training

1. Has a training needs assessment been carried out which: Identifies all posts for which specific environmental awareness training is required; and identifies the scope and level to which such training is to be given? *There will be one – by commissioning date.*

2. Are training systems in place for all relevant staff that cover the following factors:

    - the regulatory requirements associated with the Permit as they affect their work activities and responsibilities? *They will be – by commissioning date.*

    - likely potential environmental impacts which may be caused by plant under their control? This should cover both normal and abnormal circumstances; *They will be – by commissioning date.*

    - reporting procedures to inform supervisors or managers of deviations from permit conditions? *They will be – by commissioning date.*

    - procedures to be used by supervisors or managers and for the reporting of deviations from permit conditions to the Agency; *They will be – by commissioning date.*

    - prevention of accidental emissions and action to be taken when accidental emissions occur? *They will be – by commissioning date.*

3. Are the skills and competencies necessary for key posts documented and are records of training needs and training received maintained? *They will be – by commissioning date.*

4. Do the key posts include contractors, those responsible for liaising with contractors and those purchasing equipment and materials? *They will do – by commissioning date.*

5. Do you assess the potential environmental risks posed by the work of contractors and provide instructions to contractors about protecting the environment while working on site? *We will do – by commissioning date.*

6. In the last 2 years, have there been any notifiable incidents or releases, which it has been identified that lack of training was a contributory cause? *No*

7. Are there industry standards for training in this sector (e.g. WAMITAB), if so do you apply them? (If no industry standards please leave blank) – *None applicable.*

8. Are individual and organisational training needs reviewed on a regular (e.g. annual) basis? *They will be – by commissioning date.*

Emergency Planning

1. Is there an accident plan that complies with the guidance covering the following aspects of foreseeable scenarios: likelihood, consequences, actions to prevent, action to take in the event it occurs? *There will be one – by commissioning date.*

2. Has the plan identified areas where improvement is needed*? No improvements were deemed necessary. Do not know yet*

3. Where improvement has been identified, does the plan include an implementation programme with acceptable timescales to the Agency? *If improvements are identified, then yes*

4. Are there written procedures for handling, investigating, communicating and reporting actual or potential non-compliance with operating procedures or emission limits? *There will be – by commissioning date.*

5. Are there written procedures for handling, investigating, communicating and reporting environmental complaints? *There will be – by commissioning date.*

6. Are there written procedures for investigating incidents, (and near-misses) including identifying suitable corrective action and following up implementation of that action? *There will be – by commissioning date.*

7. In the last 2 years, have there been any notifiable incidents or releases for which it has been identified that lack of emergency planning was a contributory cause? *No.*

8. Are there audit records of investigations into non-compliance, complaints and incidents? Does the audit cover follow up actions? Are root causes identified? Do the audit reports go to senior managers? *None yet but there will be if any incidents arise and the EMS will cover this*.

Organisation

1.1 Is your Environmental Management System EMAS registered?
If yes select Y and go to question 4. *No.*

1.2 Is your Environmental Management System certified to ISO 14001?
If yes enter Y and go to questions 3 and 4. *No*

1.3 Is your Environmental Management System subject to external audit through a third party audit programme with a published methodology (excludes in-house company audit programme)? *No*

2.1 Has the company adopted an environmental policy and programme which:

Includes a commitment to continual improvement and prevention of pollution? *They will do – by commissioning date.*

Includes a commitment to comply with relevant legislation, and with other requirements that the organisation subscribes to? *They will do – by commissioning date.*

Identifies, sets, monitors and reviews environmental objectives, independently of the permit? *They will do – by commissioning date.*

2.2 Are there written procedures that incorporate environmental issues into the following areas (as supported by demonstrable evidence e.g. written procedures?)

The control of process change on the installation. *There will be - by commissioning date.*

Design and review of new facilities (including provision for their decommissioning), engineering and other capital projects; *There will be - by commissioning date.*

Capital approval. *There will be - by commissioning date.*

Purchasing policy. *There will be - by commissioning date.*

2.3 Are there audits, at least annually, to check that all activities are being carried out in conformity with the above requirements? *There will be - by commissioning date.*

2.4 Are they independent? (name the auditing body) *They will be - by commissioning date.*

2.5 Are there reports annually on environmental performance, objectives and targets, future planned improvements and or facilitate (participate in) local community liaison meetings? *There will be - by commissioning date.*

3. Does the company produce a public environmental statement? You may score in this box for ISO 14001 and industry systems but not for EMAS as this is a requirement for EMAS. *No*

4. Within the past 5 years have you failed to meet an improvement condition either set by the Agency in a Permit or Variation by the due date, without prior agreement? (minus 2 for each failure). ADD NUMBER OF FAILURES NOT Y OR N – *Zero*

Enforcement History

1. Number of Enforcement, Improvement, Works, Compliance or Restoration Notices issued in the past year by the Environment Agency under any legislation, by the Health and Safety Executive relevant to the COMAH Regulations or by local authorities under Part I of the Environmental Protection Act 1990 or relevant notice or Abatement Notices issued by local authorities or magistrates courts under Part III of the Environmental Protection Act 1990 (in all cases, other than any overturned on appeal by the Operator). *Zero*

2. Number of Formal Cautions, Enforcement Undertakings or Fixed Monetary Penalties issued by the Environment Agency in respect of offences under relevant legislation in the last 3 years. *Zero*

3. Number of Prohibition, Stop, Suspension or Revocation Notices issued by the Environment Agency under any legislation, by the HSE relevant to the COMAH Regulations or by local authorities under Part I of the Environmental Protection Act 1990, (other than any overturned on appeal by the Operator) in the last 3 years. *Zero*

4. Number of Convictions on prosecutions brought by the Environment Agency under any legislation, by the HSE relevant to the COMAH regulations or by local authorities (in respect of offences under Parts I or III of the Environmental Protection Act 1990) in last 5 years (or 10 years where a term of imprisonment was imposed on the Operator) (other than any overturned on appeal). Or number of any Variable Monetary Penalties issued. *Zero*

Compliance Band B