

**Natural Resources Wales permitting decisions**

## **2 Agriculture Limited Decision Document**

## Variation

**The variation number is: EPR/AP3337HF/V005**

**The applicant /operator is: 2 Agriculture Limited**

**The Installation is located at: Llay Feed Mill, Minders Road, Llay Industrial Estate, Wrexham, LL12 0PJ**

We have decided to issue the variation for Llay Feed Mill operated by 2 Agriculture Limited.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

## Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

## Key issues of the decision

### 1. Receipt of application

#### 1.1 Receipt of Application

The Application was accepted as Duly Made on 22 December 2017. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

#### 1.2 Consultation

This is a normal variation and no external consultation was required. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.

A copy of the Application and all other documents relevant to our determination are available for the public to view. Anyone wishing to see these documents could arrange for copies to be made.

#### 1.3 Requests for Further Information

In order for us to be able to consider the Application duly made, we needed more information. We requested further information relating to the OPRA profile, site layout plan, management system summary and emissions to air. Upon receipt of this information we were able to consider the application Duly Made.

Further information was also requested by way of Schedule 5 Notices. The first Schedule 5 requiring details about the site drainage and emissions to air, was issued on 27 February 2018 with a response date of 16 March 2018. The Applicant requested an extension to the deadline and their response was provided on 22 March 2018. Based on the response received a second Schedule 5 was issued on 03 April 2018 with a response date of 04 May 2018,

requiring details about the proposed changes on site, emissions to air including a H1 risk assessment, and operating techniques. The Applicant's response was received on 04 May 2018. The additional information supplied satisfied the requirements of the two Schedule 5 notices. However a third Schedule 5 Notice was issued on 24 May 2018 requiring the applicant to carry out detailed modelling of the potential short term impacts of PM<sub>10</sub>. The H1 assessment provided by the applicant in response to the second Schedule 5 indicated that modelling was required but it was not carried out. The Applicant requested an extension to the deadline and their response was provided on 28 June 2018.

The applicant was given the opportunity to withdraw their application on 18 April 2018 and reapply with no loss of their application fee provided the application did not significantly change in nature, as the response received to the first Schedule 5 Notice indicated that the proposed variation had changed since the application was made. This was further complicated by those involved in the original application having left 2 Agriculture Limited and WYG, their consultants. The applicant declined this opportunity

A copy of each of the Schedule 5 notices requesting further information were placed on our public register as were the responses when received.

#### 1.4 The Legal Framework

The variation will be issued, under Regulation 20 of the Environmental Permitting Regulations (EPR). The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which also have to be addressed.

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that this decision is consistent with its general purpose of pursuing the sustainable management of natural resources in

relation to Wales, and applying the principles of sustainable management of natural resources. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in issuing the variation a high level of protection will be delivered for the environment and human health through the operation of the Installation in accordance with the permit conditions.

## 1.5 Operator

We are satisfied that the applicant (the operator) is the person who will have control over the operation of the facility after the issue of the permit variation. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.

## 2 The Installation

### 2.1 The permitted activities

The Installation is subject to the EPR because it carries out an activity listed in Part 1 of Schedule 1 of the EPR:

- Section 6.8 Part A (1) (d) (ii) 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 from only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day.

An installation may also comprise “directly associated activities”, which at this Installation includes

- Storage and handling of raw materials
- Product storage and despatch
- Steam generation in an appliance with rated thermal input of 3.5MW
- Vehicle washing

Together, these listed and directly associated activities comprise the Installation.

## 2.2 What the Installation does

2 Agriculture Limited operate an animal feed manufacturing facility. They have held an environmental permit since 2006.

## 2.3 Key Issues in the Determination

The operator wants to add an extrusion plant to their existing facility which will produce 120 tonnes per day of ingredients to be used in the production of poultry feed. The plant and associated equipment will consist of 3 new silos to store raw and processed material, a grinder, conditioner, extruder and cooler. As part of the proposed changes the existing building will be extended to accommodate the new plant and the wheel wash and washout facility will be moved to a new area of land, extending the current site boundary which will also incorporate a car parking area.

The new extruder is a change to the operating procedures on site, but falls within the current Schedule 1 activity in the permit, Section 6.8 Part A (1) (d) (ii).

There will be three new emission points to air for particulate from the grinding process (A14), extrusion (A15) and cooling process (A16). There will be two new emission points to surface water for roof water from the extruder plant building (W4) and new car parking area (W5). There will be one new emission point to sewer (W3) as a result of the relocation of the wheel wash facility. Emission point A13, the diesel jet wash exhaust will also be relocated.

## 2.4 The site

The site is situated to the west of the Llay Industrial Estate, approximately 1km north of the village of Llay at grid reference SJ 32985 56464. As part of the variation the operator wants to increase the site boundary to incorporate a car parking area and relocate the wheel wash facility, adding an area of land to the east of the existing site.

The operator has provided an updated site plan which we consider is satisfactory, showing the extent of the facility. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.

## **2.5 Site condition report**

The operator has provided a description of the condition of the new area of the site. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).

## **4.2 The site and its protection**

### **4.2.1 Proposed site design: potentially polluting substances and prevention measures**

The existing building will be extended to accommodate the new extruder plant. All activities will be carried out indoors. The building is fitted with fast action roller doors and all doors will be kept closed while operations are being undertaken. Each of the new emission points to air will be fitted with cyclone abatement, similar to that already used on site, to control emissions of particulate. The extruder plant will generate effluent during the conditioning phase, comprising of condensed steam. This will be directed to a triple bay interceptor where it will be contained prior to removal from site. Silos for raw materials/finished product will be fitted with high level emergency alarms to prevent overfilling, and all deliveries to and from site will be supervised. All silos are within concreted bunded areas.

## 4.3 Operation of the Installation – general issues

### 4.3.1 Administrative issues

We are satisfied that the Applicant's submitted OPRA profile is accurate. The OPRA score will be used as the basis for subsistence and other charging, in accordance with our Charging Scheme. OPRA is Natural Resources Wales method of ensuring application and subsistence fees are appropriate and proportionate for the level of regulation required.

### 4.3.2 Management

We are satisfied that appropriate management systems and management structures will be in place for this Installation following the variation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

### 4.3.3 Operating techniques

Raw materials, rapeseed and field beans will be delivered to site and stored in the dedicated silos. From the silos the raw materials will be conveyed to the grinder where they will be mixed and ground. The material will then be conditioned, using steam generated on site. Once conditioned the material moves to the extruder, where it will be forced through the plant and be heated to 120°C. Finally the material moves to the cooler to bring it back to an ambient temperature before being conveyed to the final product storage silo.

The wheel wash will be operated using existing methods and there be no change as a result of its relocation to the new area of site.

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.

#### 4.3.4 The permit conditions

We have updated all previous permit conditions to those in the new generic permit template as part of a permit consolidation. The new conditions have the same meaning as those in the previous permit.

The operator has agreed that the new conditions are acceptable.

#### 4.3.5 Energy efficiency

The Operator is required to report energy usage under condition 4.2 and Schedule 4 of the permit. This will enable Natural Resources Wales to monitor energy recovery efficiency at the Installation.

### 5 Minimising the Installation's environmental impact

Regulated activities can present different types of risk to the environment, these include odour, noise and vibration; accidents, fugitive emissions to air and water; as well as point source releases to air, discharges to ground or groundwater and generation of waste. All these factors are discussed in this and other sections of this document.

For an installation of this kind, the principal emissions are: Particulate (dust) from the manufacturing process and trade effluent.

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of emissions from the Installation on human health and the environment and what measures we are requiring to ensure a high level of protection.

#### 5.1 Assessment of Impact on Air Quality

This section of the decision document deals primarily with the dispersion modelling of emissions to air from the proposed new emission points and the impact on local air quality.

The applicant completed a H1 assessment in response to the Schedule 5 issued on 3 April 2018. The assessment showed that long term emissions of particulate screened out as insignificant but that the short term Process Contribution (PC) for PM<sub>10</sub> emissions in relation to the background concentration was significantly higher than the screening threshold of 20%, at 210%. Detailed modelling of the potential impact of short term emissions of PM<sub>10</sub> on human health and on conservation sites was requested via the Schedule 5 notice issued on 24 May 2018.

The Applicant carried out detailed modelling to assess the Installation's potential PM<sub>10</sub> and PM<sub>2.5</sub> emissions to air against the relevant long and short term air quality standards, and the potential impact upon human health. These assessments predict the potential effects on local air quality from the Installation's emissions as a whole, not just from the new emission points. The dispersion modelling has been based on a worst case scenario of the Installation operating continuously at the current permitted emission rate of 20mg/m<sup>3</sup> of total particulate from each emission point.

The potential long and short term impact of emissions from the site are considered insignificant.

## **5.2 Assessment of odour impact**

The operator has carried out an Environmental Risk Assessment and considers that the potential risk of odour from the extrusion plant is not significant. The new plant will be within a building, that has fast acting roller shutter doors. New emission points to air will be fitted with cyclone abatement as with existing particulate emissions. Raw materials used in the manufacturing process are not considered to be odorous.

An improvement condition requiring the applicant to produce an Odour Management Plan (OMP) has been added to the permit. Our How To Comply guidance specifies that all operators within the food and drink sector should have an OMP in place. The OMP is to be produced in line with Horizontal Guidance Note H4 Odour Management.

### **5.3 Assessment of impact to surface and ground water**

Any additional surface water resulting from the variation will be discharged to the Singret Brook as already permitted for point W1. There will be two new emission points, W4 via an interceptor for roof water from the extruder plant building and existing car parking and yard area and W5 for runoff from the car parking area in the new area of site.

There will be no emissions to ground as a result of the variation.

### **5.4 Emissions to sewer**

The wheel wash facility will be relocated to the new area of site. It is proposed that all emissions will continue to go to foul sewer under the operator's trade effluent consent, via a new emission point, W3. A triple bay interceptor will be installed and all wash water will pass through it before being discharged to sewer. Any residual waste collected in the interceptor will be removed from site and taken to an appropriate facility for disposal.

Any effluent produced during the conditioning phase of the extrusion plant will be discharged to a triple bay interceptor where it will be stored in the tank prior to being removed from site to an appropriate disposal facility.

The operator intends to keep the existing emission to sewer, W2 to allow for the discharge of scrubber effluent, boiler blowdown and surface water as currently permitted.

### **5.5 Noise Assessment**

The operator has carried out an Environmental Risk Assessment and considers that the potential risk of noise from the extrusion plant is not significant if managed correctly. The new plant will be within a building, that has fast acting roller shutter doors. All doors will be closed when the plant is operational. The number of deliveries is not expected to increase as a result of this variation and deliveries and vehicle movements will be managed, vehicles not left idling and

speed limits imposed. Methods for managing risk in the applicant's Environmental Risk Assessment have been incorporated into the Operating Techniques table of the permit.

### **5.6 Impact on Habitats sites, SSSIs, non-statutory conservation sites etc.**

The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.

#### **SAC, SPA, RAMSAR (within 10km)**

Midlands Meres & Mosses Phase 2 (Wales) RAMSAR 3.6km SE

River Dee and Bala Lake (England) (Wales) SAC 7km E

Berwyn and South Clwyd Mountains SAC 8.3km SW

Deeside and Buckley Newt Sites SAC 8.3km NW

Johnstown Newt Sites SAC 9.4km S

#### **SSSI (within 5km)**

Chwarel Singret 1.6km E

Llay Bog 1.2km SW

#### **SINCs/LNRs (within 2km)**

Ballswood Quarry & Cockpit Wood LWS

Burton Tower Lake LWS

Alyn Waters LNR

Bryn-y-Gaer LWS

Rhydym Hall Grassland LWS

Alyn Waters LWS

Sydally Wood LWS

Hope Mountain & Ffrwdd Wood LWS

Silverdale Meadow LWS

Rackery Wood LWS

Blast Road Pond LWS

Nant y Gaer & Llay Valley LWS

### **Ancient Woodland** (within 2km)

42 areas of Ancient Semi Natural Woodland, Restored Ancient Woodland

A full assessment of the application and its potential to affect the sites listed above has been carried out.

The proposal is considered not likely to have a significant effect on any Natura 2000/Ramsar site. A Form 1 was completed and forwarded to the relevant NRM team for comment. No response was received.

It is also considered that there will not be any significant impact on any SSSIs or wildlife sites listed above. An Appendix 4 assessment was completed and forwarded to the local NRM team for information.

There is no environmental limit for particulate but the applicant carried out modelling based on the Ambient Air Directive Limit Values for human health. We consider this approach to be satisfactory. The applicant did not model for the Deeside and Buckley Newt Sites but based on the results for other sites nearer to the feed mill, it is not considered that there will be any significant impact.

### **5.7 European Protected Species**

The Llay Industrial Estate is known to support Great Crested Newts (GCN). There are currently two derogation licences for GCN compensation areas present within the environs of the Industrial Estate.

In this case the application site is located over 250m away from the nearest known GCN pond. There are other industrial units between this pond and at the application site.

We therefore consider this variation is not likely to be detrimental to the maintenance of the favourable conservation status of any local populations of GCN.

## 6 Setting ELVs and other Permit conditions

### 6.1 Translating BAT into Permit conditions

Article 14(3) of IED states that BAT conclusions shall be the reference for permit conditions. Article 15(3) further requires that under normal operating conditions; emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions.

The emission limits described in the air dispersion modelling sets the worst case scenario. If this shows the emissions from the site are low and that they will not cause a breach of air quality objectives in the area then we are satisfied that the emissions from the site will not adversely impact the surrounding environment or the health of the local community.

#### 6.1.1 National and European EQSs

As detailed in section 5.1, the environmental impact of the installation has been assessed against relevant EQSs, at the level of performance required by IED. The installation will not result in the breach of any EQSs. We accept that the applicant's proposals are indicative BAT.

### 6.2 Monitoring

We have decided that monitoring should be carried out for the parameters listed in Schedule 3 using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to demonstrate that the extruder plant and associated abatement is working in accordance with assumptions.

For emissions to air, the methods for continuous and periodic monitoring are in accordance with the Environment Agency's Guidance M2 for monitoring of stack emissions to air.

Based on the requirements set in the conditions of the permit we are satisfied that the monitoring techniques, personnel and equipment employed by the

Operator will have either MCERTS certification or MCERTS accreditation as appropriate.

### **6.3 Reporting**

We have specified the reporting requirements in Schedule 4 of the Permit to ensure data is reported to enable timely review by Natural Resources Wales to ensure compliance with permit conditions and to monitor the efficiency of material use and waste recovery at the installation.

## ANNEX 1: Improvement Conditions

We have added three improvement conditions to the permit based on the requirements for this type of facility to have an Odour Management Plan, and at the request of the site's regulatory officer. The conditions are as below, and have been agreed with the operator. Each is to be completed within three months of the consolidated permit being issued.

- *The Operator is required to produce a written Odour Management Plan (OMP) in line with Horizontal Guidance Note H4 Odour Management, for approval by Natural Resources Wales within the period specified.*
- *The operator shall update the written Site Closure Plan previously produced for IC1, to include the area of land added in variation V005. Upon completion of the plan it shall be submitted in writing to Natural Resources Wales.*
- *The Operator shall assess the options for improvement of secondary containment for the storage of all bulk liquids with regard to all relevant guidance. On completion of the options assessment, the Operator shall submit a report to Natural Resources Wales summarising the options identified together with a timetable for implementing any identified improvements.*