

**Natural Resources Wales permitting decisions**

# Farmers Boy (Deeside) Limited Deeside Meat Processing Decision Document

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## Permit Variation

The variation number is: **EPR/VP3235HS/V005**

The applicant /operator is: **Farmers Boy (Deeside) Limited**

The Installation is located at: **Deeside Meat Processing, Unit 105/106, Tenth Avenue, Deeside Industrial Park, Deeside, Flintshire, CH5 2UA**

We have decided to issue the variation for Deeside Meat Processing operated by Farmers Boy (Deeside) 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

### Receipt of application

#### Confidential information

A claim for commercial or industrial confidentiality has not been made. We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.

#### Consultation

The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements. As a normal variation, consultation was not required. 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.

### **The facility and the variation**

The extent and nature of the facilities taking place at the site is unaffected by the variation and is as stated in the permit (food manufacture/processing).

The variation application is to add air emission points to the permit (A10 – Water heater No. 3 [0.125 MW<sub>th</sub>], A11 (a and b) – FP Roaster/Smoker No. 2 [0.205 MW<sub>th</sub>], and A12 (a-c) – AFO grill [0.368 MW<sub>th</sub>]. The designation a, b (and c) is used to denote a single process emission that is split into 2 / 3 separate ducts arising from different parts of the process. It is noted that these emission points have been in existence for several years (since original permit issue) but for an unknown reason were not included in that permit, and so had not undergone formal air impact assessment. The associated processes (hot water production, cooking/roasting/smoking) are the same as those conducted in other parts of the site and already permitted. The absence of A10-12 was identified as an anomaly in the 2022 permit review, and required information and this application from the operator to rectify. In spite of the emission points and associated equipment being already present, the permitting assessment process is largely the same as if they were new releases, i.e. there is no reduction in scrutiny because they were already there.

In addition, further detail was provided on the already permitted release points A7, A8 and A9 indicating that each emission point is split into two separate ducts a and b (one for gas combustion, one for cooking chamber exhaust air). This information is incorporated into Table S3.1 of the varied permit.

### **Legislation**

NRW is satisfied that this decision is compatible 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

All applicable European directives have been considered in the determination of the application.

## The site

The operator has provided an updated site plan which we consider is satisfactory, showing the extent of the site of the facility including the new discharge points. There is no change to the permit boundary. This plan is included in the permit.

## Biodiversity, Heritage, Landscape and Nature Conservation

The installation variation is not considered '*relevant*' for assessment under Natural Resources Wales' procedures which cover the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations) and/or the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act (CROW) 2000). This was determined by referring to 'AQTAG 14: Guidance on identifying '*relevance*' for assessment under the Habitats Regulations for installations with combustion processes.'

The additional impacts from the proposed variation consist only of emissions to air from points A10-12 (See section below – "*Other Pollutants/impact*"), primarily for natural gas combustion with a combined capacity over all additional release points of 0.698 MW<sub>th</sub>. Table 1 of the guidance indicates that for National Site Network and SSSI's, the relevant screening distance for natural gas combustion units under 1MW<sub>th</sub> is 500m. The closest such site is the Dee Estuary (SAC, SPA, Ramsar, SSSI) which is approximately 1km from the site at its nearest point and so these sites can be screened out. Table 2 of the guidance indicates that for locally designated sites, the relevant screening distance for natural gas combustion units up to 5MW<sub>th</sub> is 100m. The closest potentially relevant site is a community forest approximately 850m from the installation at the nearest point and so these sites can also be screened out. Emissions from the cooking processes themselves (odour, VOC etc) are not considered relevant for habitats assessment.

There are no impacts other than air emissions arising from the variation to the installation. Thus no detailed assessment of the effect of the releases from the installation on National Site Network and SSSI sites is required. On the basis of this screening assessment, we consider that the application activities will not affect any protected ecological site.

## Environmental Risk Assessment

## Air

The Applicant has screened the Installation's potential emissions to air against the relevant air quality standards, and the potential impact upon human health. The application contained an assessment using the US EPA "Screen3" tool. However we did not accept this methodology as it does not meet our standard guidance ([Air emissions risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit)), and also noted that the data contained a number of discrepancies. So we asked for a revised assessment via a "request for information" letter (11/01/23) prior to duly making the application (03/02/23).

The revised assessment provided used the "H1 screening tool" to consider the additional point sources of combustion gases. The assessment provides a worst-case estimate of the potential effects on local air quality from the Installation's additional stack emissions (A10, A11a&b, A12a-c).

The assessment used emission factors for combustion obtained from the United States Environmental Protection Agency AP-42 methodology, rather than for example emissions monitoring data or proposed emission limit values. We consider this proportionate to the risk from these moderately sized emission points, noting a total combined combustion capacity of 0.698 MW<sub>th</sub> across all of the additional point sources. Many combustion processes under 1MW<sub>th</sub> are not subject to permitting; these are included as they are part of a larger installation and associated with the manufacturing processes. It is also noted that the reported pollutant concentrations in the H1 may appear low (e.g. for NO<sub>2</sub>, 9 - 41 mg/m<sup>3</sup> for the different sources). This may be explained because the emission factors are based on gas consumption, whereas the exhaust flows are in some cases considerably higher than stoichiometric – because the emission points not only exhaust combustion products, but act as vents to the associated food preparation processes and so affecting the exhaust flow rate and related pollutant concentration. We are satisfied that the presented data is reasonably representative of the expected emissions.

This assessment demonstrated that for the pollutants CO, PM<sub>10</sub> & PM<sub>2.5</sub> and SO<sub>2</sub>, emissions from the new sources were insignificant as process contribution (PC)s were less than 1% of relevant long term (LT) (annual) Environmental Standards (ES), and/or

less than 10% of short term (ST) ES. For nitrogen dioxide (NO<sub>2</sub>), emissions impacts did not screen out as insignificant at this stage 1 assessment as they were >1% of the annual ES of 40 µg/m<sup>3</sup>, and >10% of the ST standard of 200 40 µg/m<sup>3</sup>. However, the impacts could be considered as insignificant at stage 2 screening when background pollution is included. The Predicted Environmental Concentration (PEC) for annual NO<sub>2</sub> was calculated to be 34% of the ES of 30 µg/m<sup>3</sup>, considerably below the significance screening threshold of 70% of the ES, and the PC for daily mean NO<sub>2</sub> was calculated to be 30.2 µg/m<sup>3</sup>, 17.3% of the “headspace” (the ES minus twice the long-term background). Thereby we were confident that no environmental standard was at risk of breach from the proposed activities and emission points A10, A11a&b, A12a-c. No further assessment is required as the risk of significant pollution is negligible.

### Emission limits and monitoring

We have decided that emission limits and monitoring should be set for the air emission parameters listed in the permit. Given the limited scale of the combustion sources (boiler and ovens), combustion by-products do not require permit limits. The application considers the relevance of BAT29 and associated BAT-AEL for Total Volatile Organic Compounds (TVOC) from the smoker A11a. The applicant concludes that the process is below threshold and that the BAT-AEL does not apply. In keeping with the approach already used in the permit for A9, we have listed the BAT-AEL as an Emission Limit Value (ELV), with associated annual periodic monitoring in the varied permit, but with a footnote on applicability that “*The TVOC emission limit value and monitoring does not apply when the TVOC emission load is below 500 g/h*”. We accept the demonstration in the permit application that the load is below 500g/h, but this is subject to annual review / re-calculation as indicated in Table S3.4, process monitoring requirements, which again are set the same for A11a as A9. All other emission points, limits, and monitoring are unaltered as a result of this variation.

### Other Pollutants/Impact (including noise, odour, water, fugitive emissions)

The application makes clear in section 3.3 that the impact / risk assessments for the site at previous permitting were based on full site capacity [and activity], which has not changed since. Therefore other than the omission of the three air emission points A10-A12 and associated air impact assessment, there are no changes to site operations or impacts in this variation from those previously assessed. Including

odour, noise, water use and/or emission, fugitive emissions, material use and energy/resource efficiency. Therefore no further assessment of any factors other than air quality impact is required.

### **Reporting**

We have specified reporting in the permit. It is not altered as a result of this variation; if monitoring of A11 were required, it would be reported under existing provisions.

### **Operating techniques**

The operating techniques and environmental management system for the installation and varied processes (water heater, roaster/smoker and AFO grill with associated emission points A10-12) are unaffected by the variation.

### **The permit conditions**

There are no changes to permit conditions as a result of this variation. There are no pre-operational or improvement conditions added. The application included information in respect of existing permit Improvement Condition IC 9 relating to site production capacity. This information is noted, and has been highlighted to the site regulatory officer who is responsible for determining improvement condition discharge. The response will be assessed later, alongside other IC responses for the food and drink sector arising from the 2022 permit review and therefore the IC is not marked as complete at this variation.

### **OPRA**

The OPRA score at variation issue is unaltered at 63