

Determination of an Application for a PPC Permit under the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No.1973)

Decision Document recording the decision-making process

Note: all references to the "PPC Regulations" are to the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No.1973), as amended.

Administrative details

Application date and Agency reference ("the Permit Application") 16 March 2005
Liensantffraid Mill

Permit number (the "Permit") WP3938SH

Applicant (the "Applicant") Wynnstay Group plc

Address/location of installation (the "Installation")

Wynnstay Group plc
Liensantffraid Mill
Eagle House
Liensantffraid YM
Powys
SY22 6AQ

Name of Authorising Officer R Holland

Signature of Authorising Officer:

R Holland

All relevant documents have been sent to the IPPC Public Registers

Purpose of this document

The Decision Document ("DD") explains how the Applicant's Permit Application has been determined and why the specific conditions in the Permit have been imposed. It is a record of the decision-making process to show how all relevant factors and legislative requirements have been taken into account.

Summary of the decision

A Permit for the Operator to operate the Installation has been granted by the Agency, subject to the conditions set out in the Permit. The Agency considers that in its decision to issue the Permit and in the conditions imposed, it has taken into account all relevant considerations and legal requirements and that the permit will ensure that all appropriate measures will be taken against pollution and that no significant pollution will be caused.

Description of the Permitted Installation

A non technical description of the Permitted Installation is included in the Introductory Note to the Permit.

The Operator manufactures dry animal feeds for ruminants, pigs and poultry using a compounding process and bulk raw materials of vegetable origin to produce pellets or blends of meals. 165,000 tonnes of animal feed is produced a year on three lines. The milling process blends, grinds, mixes and extrudes the raw materials into pellets. The raw materials may be blended in specific proportions to provide a formulated product. Steam, molasses, and other liquids are added as necessary. The processing of mixes into pellets, nuts, or rolls occurs at a volume of 10 tonnes per hour. Air is used in the process to cool the mix; and it is passed through three cyclones to reduce the emissions of dust to the air. Cyclones and a fabric filter are present to reduce the emissions of dust to the air from the weigh points in the mill.

Raw materials are stored in bulk silos and the majority of liquids are stored in banded tanks. Filters are used at the intake points to reduce emissions to air during raw material delivery. Finished product is stored in bulk or is bagged.

Emissions to air arise from the combustion of gas oil in a small steam raising boiler, (thermal input is 1.83MW) and the product dryers. Particulate matter from the product dryers is released to air after abatement using fabric filters or cyclones. Particulate emission concentrations are below the indicative benchmark concentrations and are considered to be environmentally insignificant. The process generates less than 20 m³/day effluent, primarily from cleaning vehicles. All surface water drains via a series of gullies and silt traps to a three stage oil interceptor before discharging into the surface water drainage system and into the River Cain. Emissions of boiler blow down water occur each hour to foul sewer.

There are no SSSIs within 2 km of the site or Natura 2000 sites within 10 km. The Operator is a member of a Climate Change Levy (CCL) agreement. The Operator's environmental management system is not externally accredited.

PART A – THE OPERATOR AND THE DECISION MAKING PROCESS

The Agency's determination procedure

A1 "Duly made" check on Application received

The Application was determined to be duly made as submitted on 11/04/05.

A2 Consultation on the Application

The Application was advertised by the Applicant according to the requirements of Part 1 of Schedule 4 to the PPC Regulations on 27/04/05 in the Boarder Advertiser, and the London Gazette on 03/05/05.

The Agency sent copies of the Application to the following statutory consultees in accordance with Part 2 of Schedule 4 to the PPC Regulations:

- Powys Local Health Board;
- Powys County Council;
- Food Standards Agency;
- Severn Trent Water;
- Welsh Assembly Government.

A3 Consideration of consultation responses

Responses were received from the following statutory and non-statutory consultees:

- Foods Standards Agency;
- Severn Trent Water;
- Welsh Assembly Government;
- Powys County Council.

No responses were received from members of the public during the determination period.

All responses have been considered by the Agency in determining the Application. The ways in which material responses have been taken into account are described at the appropriate point(s) in this document and summarised in Appendix 1 to this document.

A4 Matters of commercial confidentiality or national security

The Applicant made no claim for commercial confidentiality and the Agency has not received any information in relation to this Application which appears to be confidential in relation to any party. There are no matters involving national security.

A5 Further information requirements

The Application was deemed duly made by the Agency, but further information was required in order for the Agency to be able to determine the Application. Further information was requested from the Applicant by notice/letter as shown in Table 1:

Table 1: Information requested and response received

Request Date	Information Requested	Response Date	Response
07/09/05	Provide details of how much water is used in the process	05/10/05	Breakdown of water use provided (Total water consumption 2202 m ³ pa, the)
07/09/05	Describe the corrective action taken as a result of the spillages of molasses in 1999 and methionine in 2000	05/10/05	The liquid feed plant that caused the molasses spill is no longer in operation. The methionine spill was caused by a forklift knocking materials off shelving, the shelves have been redesigned so they are not open. The spill migrated outside the mill building due so inadequate pointing, the wall has since been repointed, rendered and made waterproof.
07/09/05	Describe how complaints regarding noise and odour have been dealt with?	05/10/05	Noise complaints relate to vehicle movements or noisy machinery, the company has implemented improved maintenance regimes and rescheduling vehicle movements. Odour complaints were resolved in discussion with Wynnstay cause was nearby farms not the mill.
07/09/05	Provide clarification of bunding arrangements of the Fat tank (45 tonnes) and the gas oil tank (10,000) litres.	05/10/05	The fat tank is within the mill building which forms an impermeable surface containing spillages. The tank is surrounded by a metal cage and taps are locked. The gas oil tank has a brick built and water proof bund. (6mx3.5mx2.5m) Tank is to be repositioned to remove underground pipe work.
07/09/05	Provide the thermal input of the standby boiler	05/10/05	1.83 MW
07/09/05	Provide the amount of energy consumed on the site PA.	05/10/05	Electricity 6916.3 MWh/year Gas oil 3318.5 MWh/year
07/09/05	Provide details of the site closure plan.	05/10/05	None at present – applicant has stated that it would be possible to produce a plan within 12 months.
07/09/05	Provide details of the disposal of the wooden pallets	05/10/05	Wooden pallets sent via Potters contractors for chipping and reuse.
07/09/05	Provide details of the disposal of the IBCs	05/10/05	IBC's are given away to local farmers. IBC's are cleaned before leaving site.
07/09/05	Provide information on concentrations of cadmium and mercury in cleaning products	05/10/05	It was stated that the company were not aware of the use of cleaning chemicals at the mill containing these substances.
10/10/05	Provide the volume of cleaning materials used on an annual basis and confirmation whether cadmium and mercury are present	-	Response not received, but no considered necessary following revised guidance on emissions to sewer with respect to the Dangerous Substances Directive.

A6 Regulation 10(3) (operator competence)

The Agency is satisfied that the Operator is the person who will have control over the operation of the Installation after the grant of the Permit, and that the Operator will be able to operate the Installation so as to comply with the conditions that have been included in the Permit.

A7 Regulation 10(4) (requirements for SWMAs)

The Operator has replied to application question B7.1 stating that the installation does not contain an SWMA and the Agency agrees with this assessment.

A8 EPOPPRA profile

The Agency is satisfied that the EPOPPRA profile submitted with the Application remains accurate following the determination of the Application, and it will be used as the basis for subsistence and other charging, and for all other relevant purposes at the commencement of the Permit. In accordance with the Agency's EPOPPRA Scheme however, the Operator's EPOPPRA profile for the installation may change over time.

The EPOPPRA score at the time of determination is 55.

PART B – THE INSTALLATION AND ITS MANAGEMENT

B1 Permit Section 1.1.1 - The permitted activities

The Agency has determined that the Installation comprises the following activities listed in Part 1 of Schedule 1 to the PPC Regulations and the following directly associated activities.

Listed activities

- Section 6.8 Part A(1)(d)(i) "Treating and processing material intended for the production of animal food products from vegetable raw materials at a plant with a finished product capacity of more than 300 tonnes per day (average value on a quarterly basis)".

The listed activity includes storage and handling of wheat, cereal and other raw materials and product storage.

Directly associated activities

- Burning gas oil in combustion plant rated 1.8 MW combined thermal input;
- Storage and disposal of waste;
- Disposal of surface water run-off;
- Disposal of vehicle wash wastewater.

The activities comprise a single installation because the manufacturing of compound animal feeds, based upon core formulations of vegetable matter is an industrial activity undertaken within the installation that uses the following successive steps, weighing, grinding, blending, conditioning, drying, cooling, storage, transport and packing. The chemical, raw material, product and waste storage area all serve only the above activities. The boiler plant produces steam and hot water for the process activities.

B2 Permit Section 1.2 - Site plan

The Operator has provided a plan which the Agency considers is satisfactory for showing the site of the Installation and its extent. A plan is included in the Permit at Schedule 5, and the Operator is required to carry on the Permitted activities within the site boundary.

B3 Permit Section 1.5 - Minor operational changes; (Changes allowed within the scope of this Permit)

The Permit constrains the Operator to operate the activities subject to the limits and conditions in the Permit. However the Operator may make minor changes as defined within the Application by notifying the Agency in writing under Conditions 1.5.1 -1.5.4.

B4 Site Report and Protection of the Site

B4.1 Introduction

The Applicant has provided a Site Report as required by paragraph 1 of Part 1 of Schedule 4 to the Regulations, the main elements of which are:

- A description of the environmental setting and sensitivity of the site;
- A review of the pollution history of the site, including historic land use;
- An assessment of the potential for future contamination at the site, based on potentially polluting products stored and/or used at the site, and the environmental setting of the location.

The applicant has assessed the environmental sensitivity of the site with reference to the geological, hydrogeological and hydrological setting of the site, and adjacent land uses, including the presence of ecological receptors. The applicant has reviewed the historical development of the site, including the pollution history of the site. The applicant has also

assessed the potential for pollution associated with the recent land use of the site, identifying potentially polluting substances used and stored at the site, and assessing the effectiveness of the pollution prevention measures installed at the site, which are designed to minimise the potential environmental impacts of the substances.

The Agency has assessed the applicant's site report using the ASR checklist ref: (WP3938SH ASR Checklist) which is appended this document.

B4.2 Site Location and Environmental Setting

The installation is located at Eagle House, Mechain, Powys, within an area of mixed commercial and residential development. The landuse of the installation and the immediate vicinity includes railway workings, and a brewery. More recently, the site has been used for the manufacture of animal feed.

The geology of the site comprises made ground, overlying undifferentiated river terrace deposits, and deposits associated with the Ordovician Allt-tair-fyynnnon Mudstone Formation. The installation is situated over a Minor Aquifer of intermediate vulnerability to surface contamination, based on the Groundwater Vulnerability map of the area.

A culverted watercourse, a tributary of the River Cain is situated immediately beneath the site, and presents at the southern boundary. The River Cain is situated approximately 250 metres south of the site.

The application documents state that five spillages with the potential to cause ground contamination have occurred within the last five years. These have involved:-

- Allimet (animal feed supplement), caused by damage to a storage tank;
- Fat caused by the failure of spill containment;
- Sheep feed supplement, caused by the separation of a pipe from the storage container;
- Molasses spill which occurred as an IBC overflowed during filling in the liquid feed plant.
- Methionine spill occurring as a result of a fork knocking materials off a shelf inside the Mill building. The spillage entered the surface water drainage system as it seeped through the wall due to the poor condition of the mill wall pointing and was automatically discharged from the pumping chambers to surface water.

The spillage of allimet and methionone were not contained on the floor of the building/surface of the storage area.

Remedial measures have been undertaken to mitigate against further incidents, including the installation of an interceptor, the revision of pallet storage arrangements and the padlocking, coupling and welding of pipework associated with the storage of sheep supplement. The liquid feed plant is no longer in operation and the mill wall has since been repointed, rendered and made waterproof. A manual pump chamber has been installed to discharge water to the watercourse.

B4.3 Assessment of Pollution Prevention Measures

B4.3.1 Potentially Polluting Substances

Adequate information to enable the Agency to determine the Application has been provided in the ASR. The Operator has reviewed the operations currently undertaken within the installation, to assess the likelihood of land pollution associated with these activities. The Operator has identified the locations where potentially polluting substances are stored, and the locations in which potentially polluting incidents may occur.

The following substances stored at the site are identified as potentially polluting substances:

- Animal feed raw ingredients;
- Animal feed supplements;
- Gas oil;
- Vehicle cleaning detergents.

B4.3.2 Areas Assessed as 'Reasonable Possibility'

The operator has assessed the likelihood of pollution associated with the activities at the site, using the criteria 'no likelihood' and 'medium likelihood' of pollution. The Agency has reassessed the pollution potential of the installation, using the criteria specified in the H7 guidance document.

The assessment undertaken by the Agency has revised the classification associated with the storage of gas oil, fat, molasses, and traffic film remover at the installation and considers the activities present a 'reasonable possibility' of pollution for the reasons described below:

Table 4.2 of the application provides details of the arrangements for the storage of raw materials and summarises the condition and nature of the primary, secondary and tertiary containment measures. The summary provides that the above ground molasses storage tank, the fat tank, the gas oil tank and the associated pipework, the IBC storage area and the traffic film remover holding tank, whilst located on hardstanding, are not located within bunded areas.

The Agency's guidance document 'Technical Guidance Note by IPPC H7 Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme' details requirements for indicative measures to control emissions to land in 'box 5'. These measures are not in place in this instance therefore the Agency cannot agree with the Applicant's assessment of no likelihood of pollution.

The Agency also considers that there is a reasonable possibility that pollution is present within the area of the underground molasses storage tank. Whilst the operator proposes to remove the pump and pipework associated with the gas oil tank, the Agency considers that pending the removal of the infrastructure, a reasonable possibility of pollution exists within this area of the site.

B4.4 Site Protection and Monitoring Programme

The Agency considers that this report adequately describes the condition of the site and in particular identifies any substance in, on or under the land that may constitute a pollution risk. To ensure the continued effectiveness of pollution prevention measures to protect the land the Operator is required to implement and operate under a Site Protection and Monitoring Programme (SPMP), (Conditions 2.1.2 and 2.10.9), the design of which must be reported to the Agency within two months from the date of permit issue, Condition 4.1.7. The SPMP should address:

1. Investigation of the integrity of the sub surface drainage system.
2. Integrity testing of the primary, secondary and tertiary (hard standing areas) pollution prevention measures.
3. Collection of reference data in those areas of the installation in which a reasonable possibility of pollution is found to exist.

The Application indicates that there is a "reasonable possibility" of future pollution of the land and therefore reference conditions must be established and limits set where applicable. Collection of reference data is required (Conditions 2.10.10 - 2.10.10.2) and the data must be reported to the Agency within six months from the date of permit issue.

B4.5 Improvement Conditions

For the following two reasons, an improvement condition (IP1) has been included in the permit requiring the Operator to undertake a review of storage arrangements and propose improvements:

- The storage of approximately 4 Bredol IBCs and 1 Innozyl IBCs are outside the bunded/designated area. The storage arrangement presents a risk of surface water and ground contamination in the event of spillage or loss of primary containment.
- Until the gas oil tank and associated pipework is removed is represents a 'reasonable possibility' of pollution. The Agency need to be reassured that this removal has been completed.

B5 Permit Section 2.12 - Multiple Operator installations

This is not a multi-Operator installation.

Management

Management techniques are one of the available techniques for emission prevention and control and are therefore part of the determination of BAT for the installation. The permit contains Standard Conditions at 1.3 and 2.3 which are designed to deliver the requirements in most cases.

B6 Permit Section 1.3 - Overarching Management Condition

The Agency is satisfied that most of the appropriate management systems and management structures are in place for this installation, and that sufficient financial, technical and manpower resource is available to the Operator to ensure compliance with all the Permit conditions. Standard Condition 1.3.1 will ensure that the Operator maintains this position.

The Agency has identified some deficiencies in the management systems based on the information provided and has addressed these deficiencies through the imposition of improvement condition IP5. This requires the Operator to ensure that the current EMS meets the standards set out in Section 2.3 of the Agency Guidance Note IPPC S6.10, Dec. 2002, Issue 1 and the methods detailed therein. In particular, the EMS training programme should cater for all staff, including contractors and those purchasing equipment and materials.

B7 Permit Section 2.3 - Management

B7.1 Permit Section 2.3.2-4 Staffing and Training

The information provided in response to Questions in Section 2.3 of the Application indicates that the installation will be operated by an adequate number of staff, who are suitably trained and supervised. Appropriate written operating instructions will be available, and a system will be in place for the recording of staff training. Standard conditions 2.3.1 to 2.3.4 will ensure that the operator maintains this position.

A training needs analysis has been included in the application together with a training schedule for mill operators.

B7.2 Permit Section 2.3.5-6 Operation and Maintenance

The information provided in response to Questions in Section 2.3 of the Application indicates that the installation will be operated and maintained in compliance with the Conditions in the Permit. Standard conditions 2.3.5 and 2.3.6 will ensure that the operator maintains this position.

The Operator has a formal paper-based maintenance system which includes a procedure for identifying, reviewing and prioritising items of plant for maintenance.

The operator has provided example checklists for maintenance of blenders, Reference KE/RJ/021 (23.06.04), outside plant maintenance schedules, maintenance check list for packers, Reference KE/RJ/020 (26.06.04), a calibration schedule (2001), an inspection schedule (2003), maintenance check list for bulk outloading, Reference KE/RJ/019 (23.06.04), maintenance planning, programmed preventative maintenance and a blank mill maintenance check list which identifies daily, weekly and monthly checks to be carried out.

The operator has also provided a list of plant maintained by named contractors.

B7.3 Permit Section 2.3.7-8 Incidents and Complaints

The information provided in response to Questions in Section 2.3 of the Application indicates that there will be a suitable incident/complaint logging and response system in place. Standard conditions 2.3.7 and 2.3.8 will ensure that the operator maintains this position.

A copy of the procedure for handling non compliance is provided with the application, it identifies what constitutes a non compliance.

The Maintenance manager is responsible for recording and identifying remedial actions. Contact details are provided for the Environmental Health. Examples of incident report forms, audit records of incidents and records of complaints have been provided.

B7.4 Permit Section 2.3.9 Fit and Proper

There are no specified waste management activities within the installation boundary

PART C: DETERMINATION OF PERMIT CONDITIONS

C1. The legal requirements relating to permit conditions

Regulation 11 of the PPC Regulations requires that certain general principles are taken into account in the determination of permit conditions for PPC installations. These include that installations should be operated so as to ensure that (a) all appropriate preventative measures are taken against pollution, in particular through the application of BAT, and (b) no significant pollution is caused. Additional general principles include pursuance of the waste strategy objectives of the Waste Framework Directive, using energy efficiently, preventing accidents and returning sites to a satisfactory state on definitive cessation.

Regulation 12 requires the permit to include such conditions as the regulator considers appropriate to comply with a range of requirements including the following:

- ensuring a high level of protection of the environment;
- setting emission limit values (ELVs) for pollutants likely to be emitted from the installation in significant quantities, having regard to their nature and potential to transfer pollution from one environmental medium to another;
- that these ELVs shall be based on BAT for the description of installation but shall take account of its technical characteristics, geographical location and the local environmental conditions;
- that the ELVs may, where appropriate, be supplemented or replaced by equivalent parameters or technical measures;
- that, where an EQS requires stricter ELVs, these shall be set;
- that conditions should aim to minimise long distance and transboundary pollution; ensure protection of the soil and groundwater and management of waste generated; relate to periods of abnormal operation, start up, stoppages etc; set steps to be taken prior to and after definitive cessation of operations; and set suitable emission monitoring, reporting and notification requirements.

Regulation 3 contains the definition of BAT and this is supplemented by a number of other considerations set out in Schedule 2.

There are also a number of other regulatory requirements beyond those in the PPC Regulations described above, which may affect the operating conditions that are required to be included in the permit. These are generally dealt with in Part C5 ahead.

C2. The Agency's general approach to the determination / condition setting

The Agency has produced technical guidance for most sectors subject to PPC. Together with cross-sectoral technical guidance, these include indicative standards that the Agency considers likely to deliver the various requirements set out above, having regard to any corresponding BREF Note. The indicative standards are divided into sections that correspond to each of the relevant requirements described in Section C1 above. The operator's application should include information about how it is proposed to operate the installation so as to meet these indicative standards or justify why other standards should apply instead. The Agency will assess the operator's proposals and if it is satisfied will apply specific as well as standard permit conditions designed to ensure the approved standards of operation of the installation will be maintained.

Where there is no specific technical guidance for the activities that make up the installation there will be other related technical guidance that can be used to identify the technologies and techniques employed and the standards that can be obtained. There is also other technical literature that the Agency may use to support its analysis of the installation.

C3. Conditions relating to point source emissions

C3.1 Relevant Guidance and Parts of Application

The indicative BAT techniques relevant to this installation are set out in Technical Guidance Note (TGN) Sector Guidance Note IPPC S6.01 and the associated Annex D on the production of Animal Feed Mill Processing and Petfood (dry) which has been developed having regard to the related BREF Note IPPC Draft Reference Document on Best Available Techniques in the Food, Drink and Milk Industries – Final Draft, June 2005. Additional relevant guidance is also included in Process Guidance Note 6/26 (05): Secretary of State's Guidance for Animal Feed Compounding Processes.

The Agency has assessed the operator's BAT proposals as set out in relevant sections of the application and compared them against the indicative standards applying to this sector as described in the TGN.

C3.2 Process Description

The installation manufactures dry animal feeds for ruminants, pigs and poultry using a compounding process and bulk raw materials of vegetable origin to produce pellets or blends of meals. 165,000 tonnes of animal feed is produced a year on three lines.

The process involves:

- Blending;
- Grinding;
- Extruding the raw materials into pellets;
- Cooling.

Sections C3.3 - C3.6 consider the application of BAT, emissions, monitoring and the need, or otherwise, for improvements.

C3.3 Discharges to Air

There are 7 point source emissions to air, which are summarised in Table 2. There is also a fugitive emission to air from breather vents from the gas oil tank and these are considered in Section C4.

The application identifies two types of emissions to air, being combustion products from the boiler plants and particulate matter from feed production.

C3.3.1 Combustion Products

The site has one boiler plant on site associated with the process activities (emission point A1,) with a thermal input of 1.83 MW. The boiler plant is fuelled on medium fuel oil low sulphur (<0.1%). The air emissions from this boiler plant consist of NOx, SOx and CO. There is also a standby boiler with a thermal input of 1.83 MW, (emission point A2). Only one boiler is operated at any one time.

Table 2.2.11 incorporates the requirements of the Sulphur Contents of Liquid Fuel Regulations 2000.

Emissions from combustion plant < 5 MW are considered to be insignificant (AQTAG12). For this reason it is not considered necessary to set any further ELVs, monitoring requirements or improvement conditions.

Table 2: Releases to air

Release Point	Source	Controls	Emissions	Concentration (mg/m ³)	Indicative Benchmark ⁽¹⁾ (mg/m ³)	Flow Rate (m ³ /hr)	Monitoring	ELV (mg/m ³)
A1 referred to as "A1" on drawing 626/04	Boiler exhaust	None	NOx SOx CO	Not measured	N/a	2,952 [0.82 m ³ /min]	None identified in Section 2.10 of application.	None
A2 referred to as "A2" on Drawing 626/04	Standby boiler exhaust	None	NOx SOx CO	Not measured	N/a	2,952 [0.82 m ³ /min]	None identified in Section 2.10 of application.	None
A3 referred to as "B1" on Drawing 626/04	Cooler 1	Cyclone	Particulate	23.1	50	38,194 [10.6 m ³ /min]	None identified in Section 2.10 of application.	50
A4 referred to as "B2" on Drawing 626/04	Cooler 2	Cyclone	Particulate	69.3	50	16,625 [4.6 m ³ /min]	None identified in Section 2.10 of application.	90
A5 referred to as B3 on drawing 626/04	Cooler 3	Cyclone	Particulate	16.5	50	23,411 [6.5 m ³ /min]	None identified in Section 2.10 of application.	50
A6 referred to as C1 on drawing 626/04	Dust suppression unit	Cyclone and fabric filter	Particulate	25.8	20	6,147 [1.7 m ³ /min]	None identified in Section 2.10 of application.	35
A7 referred to as G1 in drawing 626/04	Grinder	Fabric filter	Particulate	Not measured	20	Not measured	None identified in Section 2.10 of application.	None

Note 1: The indicative benchmarks are based on the LAAPC Process Guidance Note Draft PG6/26(05) Animal Feed Compounding Processes.

C3.3.2 Process Particulate

Emission points A3, A4, A5 and A6

The application included particulate emissions from the cooler stacks (A3 to A5) and the dust suppression system (A6) in the H1 assessment. However, it is not proportionate or risk based to consider these particulate emissions in this way because there are limitations in the H1 method which will always identify these releases as significant. H1 assumes that all particulate releases are PM10s and all assessments of significance are based on the EAL for this. However, it is accepted that only a small proportion of the particulate releases from installation of this type are <PM10 and therefore the EAL is not appropriate as a comparison. A greater proportion of the particulates are >PM10, and therefore the main impact from these is nuisance and odour. Using the Agency's internal guidance on particulate releases to atmosphere from animal feed mills¹ it is concluded that a qualitative approach to impact assessment is more appropriate for particulate releases from these release points because:

- The operator understands the quantity and nature of their emissions to air;
- The operator has a clear understanding of the source-pathway-receptors;
- The operator has particulate abatement in place in the form of fabric bag filters (A6) and cyclones (A3 to A5);
- There is no recent history of complaints associated with emissions to air (either dust or odour). The coolers (A3 to A5) and the dust suppression plant (A6) have the potential to produce odours. However, Powys County Council have confirmed that there have been no odour complaints in respect of the installation in the last 2 years indicating that this potential impact is being managed appropriately.

Emissions from A4 and A6 are considered to be significant for the following reasons:

- The concentration of particulate released from Cooler Stack 2 (A4) (69.3 mg/m^3) is greater than the indicative benchmark (50 mg/m^3) for such releases given in Annex D to Technical Guidance Note S6.10;
- The concentration of particulate released from the dust suppression system (A6) (25.8 mg/m^3) is greater than the indicative benchmark (20 mg/m^3) for such releases given in Annex D to Technical Guidance Note S6.10.

The variability shown between A3/A5 and A4 (which are from the same source type and use cyclones for abatement) are such that the Agency requires the consistent operation of the processes to achieve the lowest possible emissions. Therefore ELV's have been set for A3, A4 and A5. An ELV has also been set for A6 as this exceeds the Benchmark level.

The issues identified above (exceedance of benchmarks, variability between similar plant) suggest that there are underlying issues regarding the plant or how it is operated. For this reason an improvement condition (IP3) has been described in Section C3.3.4, below.

Emission point A7

The emission of particulates from the storage and grinding of materials is minimised by the use of fabric exhaust filters at emission point A7. There are two fabric filters one is pressure tested and one is not and they are cleaned using reverse jet reverse flow methods.

There was no monitoring data supplied in the application for emissions point A7. An improvement condition (IP2) has been included to ensure that the Operator gains a clear

¹ Food and Drink Sector PPC Food and Drink Sector, Animal Feed, Flour Mills and Dairies, Particulate Releases to Atmosphere, Version 2 - 18/07/05, Prepared by Howard Leberman PPC Sector Coordinator.

understanding of the emissions from this point, and the results will enable the Agency to assess whether any additional monitoring or ELVs are required for release point A7.

C3.3.3 ELVs and Monitoring

Combustion Products: ELVs and monitoring are not considered appropriate for combustion related emissions due to the insignificant size of the boiler plant and stand by boiler (1.83 MW), (A1 and A2).

Particulate A3-A6: It is considered proportionate to set concentration ELVs and annual monitoring for release points A3 to A6 for the following reasons:

- Emissions either form a significant proportion or exceed the indicative benchmark.
- Emissions from A3-A5 are from similar sources (coolers) and are treated using similar abatement systems (cyclones), but show considerable variability in the level of emissions released.

Where emissions are below the benchmark (A3 and A5) ELVs have been set at this level. Where emissions are above the benchmark (A4 and A6) ELVs have been set above this level including a reasonable level of headroom. See also Section C3.3.4 for discussion of the associated improvements that are required.

The Secretary of State's Guidance for Animal Feed Compounding Processes PGN 6/26 (05) states that:

"Emissions from particulate arrestment plant (except where the final discharge of the arrestment plant is within buildings) where the exhaust airflow exceeds 100 m³/min should be continuously indicatively monitored for particulate matter. (By continuous indicative monitoring is meant monitoring to indicate the relative performance and/or process variation. Such monitoring does not provide data to demonstrate compliance with a numerical emission limit.) The indicative monitor should be fitted with a visual and audible alarm which activates at a reference level agreed with the regulator."

Emissions from A3-A6 do not exceed 100m³/min and are therefore not required to have continuous monitoring.

It is not considered necessary to set ELVs for annual mass emissions. Standard Condition 2.2.1.3 and Table 2.2.2 address these requirements.

Particulate A7: Monitoring and ELVs have not been set on release point A7 as emissions data is currently not available. The operator needs a clear understanding of the nature and quantity of the discharges from this release point, and this is discussed further in C3.3.4, below. In the absence of an ELV the operator is required to monitor particulate emissions from A7 on an annual basis via Table 2.10.1 of the permit.

C3.3.4 Improvement Condition(s)

Because there is a need for a clear understanding of the nature and quantity of all particulate discharges, an improvement condition (IP2) has been set, which requires the Operator to determine flow and releases of particulates from A7 over representative operating conditions. IP2 also requires the operator to justify whether continuous indicative monitoring would be appropriate by making reference to PGN 6/26 (05).

Emissions from A4 and A6 exceed the relevant benchmarks for particulate from coolers and other plant. Furthermore, there is considerable variability in emissions from A3-A6, which are from similar source types and abatement systems. This suggests that there are underlying issues regarding the plant or how it is operated. Cyclones are used for abatement of these

emissions, which are not regarded as BAT for this sector. Consideration of upgrading abatement equipment will be addressed through IP3.

"The Operator shall review the techniques used to minimise emissions of particulates to air from points A3, A4, A5, A6 and A7. A written report of this review with proposals for improvements to achieve the benchmark limits in the Secretary of State's Process Guidance Note 6/26 (05) shall be submitted to the Agency."

C3.4 Emissions to Water

The only emissions to controlled water from the site are those to surface water drains and the River Cain which are associated with rainwater run off. This is shown in Table 3. It should be noted that there is no process effluent associated with the installation and discharges to controlled water.

Table 3 Releases to water

Release Point	Maximum Flow of Effluent (m³/d)	Average Flow of Effluent (m³/d)	Average Effluent Temperature (°C)	Maximum Effluent Temperature (°C)
W1 (surface water flow from rainwater run off)	Not measured	Not measured	Ambient	Ambient

C3.4.1 Surface Water Run-Off

Surface water run off from the site is discharged via a series of gullies and slit traps to a three stage oil interceptor and manually operated pumping chamber before discharging at release point W1 into surface water drainage system and into the River Cain.

C3.4.2 ELVs and Monitoring

It is judged not proportionate to set ELVs or monitoring requirements because the water emissions are not judged to be environmentally significant.

In reviewing the discharges to water the Agency has concluded that Direct Toxicity Assessment is not an appropriate method to be utilised for assessing the impacts to water.

C3.4.3 Improvement Condition(s)

It has not been considered necessary to include any improvement conditions for releases to controlled water for the reasons outlined in Sections C3.4.1 to C 3.4.2.

C3.5 Emissions to Sewer

Emissions to sewer (S1) are from low pollution risk activities/sources, such as vehicle washing and boiler blowdown. The discharge is summarised in Table 4.

Table 4 Releases to sewer

Release Point	Maximum Flow of Effluent (m³/d)	Average Flow of Effluent (m³/d)	Average Effluent Temperature (°C)	Maximum Effluent Temperature (°C)	Maximum pH of Effluent	Minimum pH of Effluent
S1(water from vehicle washing and boiler blow down)	2.64	Not measured	Not measured	43°C	Not measured	Not measured

Note 1: Values listed for the discharge to sewer are the levels permitted by the Trade Effluent Discharge Consent

Water from the vehicle washing and boiler blow down is discharged to sewer under consent from Severn Trent Water.

C3.5.1 ELVs and Monitoring

There are emissions of dangerous substances (Hg, Cd) to sewer. Such emissions arise only from the trace contamination of materials (sodium hydroxide). Emissions are known to be so small from such usage that no assessment of their impact is necessary. Therefore no further assessment has been carried out for this application and no limits have been set on emissions of dangerous substances to sewer.

C3.5.2 Improvement Condition(s)

No improvement conditions are considered necessary.

C3.6 Other Discharges

There are no direct discharges to land or groundwater from the installation.

C3.7 Summary

The proposed techniques for priorities for control described above will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.

Together the ELVs set in permit Condition 2.2.8, the monitoring set in Condition 2.10.2 and the improvement conditions contained in Condition 1.4 secure that the approved position based on BAT and the other requirements of the Regulations for point source emission control described above will be maintained by the operator.

C4. Conditions relating to fugitive emissions

Various requirements in regulations 11 and 12 mean that control of fugitive emissions should be secured by permit conditions. The Agency has assessed the operator's proposals for control of fugitive emissions and considers that they will meet the regulatory requirements. Standard Conditions 2.2.4 and 2.2.5 will ensure that the operator maintains this position.

C4.1 Fugitive Emissions to Air

Refrigeration and chilling plant are not used so fugitive releases of ammonia or HCFCs are not an issue for this installation. Delivery of dry bulk materials for storage (via Intakes 1 to 4) may generate potential fugitive releases. However Intake 1 is abated with dust units inside a building. Intake 2 currently does not have an abatement system however it is due to be replaced with a new intake which will include a fan and dust unit to prevent emissions to atmosphere and Intakes 3, 3a, 4 are abated with dust collection/filtration units. All dust collection/filtration units are maintained to manufacturers instructions with filters replaced as required.

Other fugitive emissions include releases from the following tanks:

- Gas oil breather vent.

Fugitive emissions may also occur from dust on the site.

C4.2 Fugitive Emissions to Sewer, Surface Water and Ground/Groundwater

For the following two reasons, an improvement condition (IP1) has been included in the permit requiring the Operator to undertake a review of storage arrangements and propose improvements:

- The storage of approximately 4 Bredol IBCs and 1 Innozym IBCs are outside the bounded/designated area. The storage arrangement presents a risk of surface water and ground contamination in the event of spillage or loss of primary containment.
- Until the gas oil tank and associated pipework is removed is represents a 'reasonable possibility' of pollution. The Agency need to be reassured that this removal has been completed.

C5. Conditions relating to raw materials and water

The use of raw materials and water are some of the available techniques for emission prevention and control and are therefore part of the determination of BAT for the installation. In addition "the consumption and nature of raw materials (including water) used in the process" is one of the factors to be considered in determining which of the other available techniques are BAT (see Schedule 2 of the PPC Regulations). The Agency has assessed the proposals set out in the Application in response to question B2.4. They are considered consistent with the use of BAT and the standard Conditions 2.4.1.1-3 will ensure that the operator maintains this position.

The water usage for the installation is 13 litres per tonne of product based on an estimate of 165,000 tonnes of product and 2202m³/year water use. The Agency considers that this is a low water use process. The guidance does not include a benchmark for the animal feed processing and petfood (dry) sector.

C6. Conditions relating to waste handling and storage

Waste handling and storage techniques are some of the available techniques for emission prevention and control and are therefore part of determination of BAT for the installation. Regulation 12(9)(b) also requires consideration of appropriate measures for the management of waste generated by the installation. The Agency considers that the Applicant has appropriate measures in place for the storage and handling of waste to prevent releases during normal operations and to minimise the potential for accidental releases. The standard Permit Condition 2.5.1 will ensure that the operator maintains this position.

C7. Conditions relating to Odour

On consideration of the Application, the Agency considers that the activities carried out at the installation have the potential to cause odour, but that such odour is unlikely to escape beyond the installation boundary and is not likely to cause annoyance and that the Applicant's proposals in respect of odour control represent BAT. Agency therefore considers that the standard Condition 2.2.6.1 is appropriate and sufficient.

The consultee response from Powys County Council indicated that there were a number of complaints regarding odour from 1995-1999, but that no odour complaints have been received since that time.

The Operator has carried out an olfactory assessment on a site reconnaissance and indicated that odour from mill materials was largely confined to the mill building, was barely detected outside the mill building and was not present outside the site boundary. No complaints have been received in the last three years.

C8. Conditions relating to Noise (and vibration)

On consideration of the Application, the Agency considers that the activities carried out at the installation have the potential to cause noise that might cause annoyance.

The consultee response from Powys County Council indicated that there have been a number of complaints regarding noise dating from 2002 the most recent complaint was made in July 2003 when the noise of worn machinery could be heard from the plant.

Whilst the Agency considers that the Applicant's proposals in respect of noise and vibration control represent BAT to prevent/minimize such noise, the Agency considers that it is appropriate to impose further conditions which have therefore been included in the Improvement Programme in respect of noise emissions from the installation. Improvement condition IP4 requires the development and implementation of a noise management plan.

C9. Conditions relating to Pre-operation

Regulation 12(9)(d) allows the imposition of conditions in respect of "steps to be taken prior to the operation of the installation. The Agency considers that the circumstances do not require the imposition of any pre-operational Conditions.

C10. Conditions relating to Off-site (including Off-site monitoring)

Regulation 12(12) allows the imposition of off-site conditions, subject to compensation in accordance with the Regulations. The Agency considers that it is not necessary to impose any off-site Conditions.

C11. Conditions relating to Waste recovery or disposal

Regulation 11(3)(a) requires a consideration of appropriate conditions to ensure that "waste production is avoided in accordance with Council Directive 75/442/EEC on waste; and where waste is produced, it is recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment". The Agency has considered the proposals in the Application for the avoidance of waste production and, in respect of such waste as is produced, its potential recovery or subsequent disposal. (See Section 2.6).

The Agency is satisfied that the proposals show that waste production will be avoided as far as possible, and where waste is produced it will be recovered unless technically and economically impossible. The Agency is further satisfied that the Operators justification for their proposed waste disposal option shows that such waste that does arise from the installation that cannot be recovered will be disposed of using a disposal method that avoids or reduces any impact on the environment. Standard Conditions 2.6.1 will ensure that this position is maintained.

The operator has stated that they have a system in place that documents information about the waste disposed or recovered from the installation (B2.5.2, incorporated into the permit via Table 2.1.1). Currently IBC containers are given away to local farmers and the initial review application identified that that this may not fully comply with the Duty of Care Regulations. However, the Agency considers that this is a minor issue for this installation and is best managed as an inspection issue and has been identified in the handover document.

C12. Conditions relating to Energy Efficiency

Some aspects of energy efficiency form part of the consideration of BAT above. Regulation 11(3)(b) also requires appropriate conditions to be imposed in order to secure that "energy is used efficiently". The Agency has considered the information in the Application in respect of energy efficiency, including that for the Applicant's energy management system. (See Section B2.7). The Operator is a member of a Climate Change Levy agreement (Agreement number UKASTA/30040). Annual electricity consumption is 6,916,000 kWh/year and gas oil consumption is 3318000 kWh/year, equivalent to 65 kWh / tonne product. IPPC S6.11 does not include an energy benchmark for the animal feed and pet food (dry) sector. Energy is not considered a major environmental issue for the installation as consumption is low compared to the food and drink sector.

The application makes reference to a number of energy efficiency measures that have been implemented at the installation, including energy efficient lighting and climate control systems.

In respect of Condition 2.7.1, the Operator is required to report the kWh of energy used at the installation each year. This will enable comparisons of the energy consumption between years.

C13. Conditions relating to Accident prevention and control

Regulation 11(3)(c) requires the consideration of appropriate conditions to secure "the necessary measures are taken to prevent accidents and limit their consequences."

The Agency has considered the accident management plan submitted under Section 2.8 of the Application and considers that the Applicant has a suitable system in place to identify, assess and minimise the environmental risks and hazards of accidents and their consequences. Standard Condition 2.8.1 in the Permit is appropriate and sufficient to ensure that the necessary measures will be taken to prevent accidents and to limit there consequences.

C14. Conditions relating to Closure and decommissioning

Regulation 11(3) provides that "upon definitive cessation of activities the necessary measures are taken to avoid any pollution risk and to return the site of the installation to a satisfactory state". Regulation 12(9)(d) also requires that there be appropriate conditions in terms of steps to be taken after the definitive cessation of operations.

The Operator does not currently have a site closure plan, therefore in addition to Standard Condition 2.11, further improvements requiring the Operator to develop a written Site Closure Plan are incorporated under improvement condition IP6.

C15. Conditions relating to On-site monitoring

Regulation 12(9)(f) requires consideration of appropriate conditions to address "emission monitoring requirements specifying measurement methodology, frequency, and evaluation procedure" The Agency has decided that emissions monitoring should be carried out for the parameters listed in Table 2.2.2, using the methods and to the frequencies it has specified in those Tables. These monitoring requirements have been imposed in order to ensure the level of environmental protection for emissions to air is maintained.

No monitoring requirements are included at Conditions 2.10.2 to 2.10.4 of the Permit.

C16. Conditions relating to Records

Effective record keeping is considered to be one of the management techniques for emission prevention and control. It is considered that the standard condition requirements are appropriate for this Installation.

C17. Conditions relating to Reporting

Regulation 12(9)(f) requires consideration of appropriate conditions in respect of the reporting of monitoring results. It is considered that the standard condition requirements are appropriate for this installation

Water used annually is a useful indication of the efficiency of water usage and will highlight improvements. Energy use is reported for similar reasons and waste produced is a good indicator of process efficiencies. Therefore, in addition to the reporting described above the Operator is also required to report the following:-

- Towns water consumption;
- Gas oil consumption;
- Electricity consumption;
- Waste recovery and disposal.

Performance indicators are also required to be reported. This includes the total annual production of the various products produced by the Operator at the installation, and the waste water consumption and energy use per tonne of product.

C18. Conditions relating to Notifications

Regulation 12(9)(f) requires consideration of appropriate conditions for notification of incidents or accidents which may cause significant pollution. It is considered that the standard condition requirements are appropriate for this installation.

C19. Other legal requirements relevant to the determination of the Application and to the setting of permit conditions

Industry Specific

C19.1 Relevant Secretary of State Directions

There are no Secretary of State Directions made under the Pollution Prevention and Control (England and Wales) Regulations 2000, as amended, which are relevant to the determination of this Application.

C19.2 Regulation 12A – implementation of the Solvent Emissions Directive (SED) (1999/13/EC)

The Installation does not include any activity listed in Annex I of the Directive or activity which, whilst listed in Annex I, is above the relevant threshold in Annex IIa, so no provisions of the SED apply.

Air

C19.3 Environment Act 1995 – Section 81 (National Air Quality Strategy)

In determining the conditions for this Permit, the Agency has had regard to the National Air Quality Strategy. The Agency considers that it has taken its decision in compliance with the NAQS, and that there are no additional conditions that should be included in this Permit.

Water

C19.4 Groundwater Regulations 1998

The installation does not permit the direct discharge of List 1 substance(s) to groundwater.

The operation of the installation will not cause the disposal of a List 1 substance or other activity that might lead to an indirect discharge of such a substance but "prior investigation" within the meaning of the Regulations shows that indirect discharges would not occur and conditions have been imposed to prevent such discharges.

C19.5 Water Framework Directive Regulations 2003

Consideration has been to whether any additional requirements should be imposed in terms of the Agency's duty under regulation 3 to secure the objectives of the Water Framework Directive through (inter alia) PPC permits, but it is felt that existing conditions are sufficient in this regard and no other appropriate requirements have been identified.

Waste

C19.6 Waste Management Licensing Regulations (WMLR 1994) - (pursuit of the relevant objectives where there is the disposal or recovery of waste)

The installation includes no activities for the disposal or recovery of waste.

C19.7 Waste Oils Directive

The installation does not contain waste disposal or recovery activities involving waste oils to which the Directive applies.

C19.8 Hazardous Waste Directive

The installation does not contain hazardous waste disposal or recovery activities to which the Directive applies.

Conservation

C19.9 The Conservation (Natural Habitats etc) Regulations 1994

The proposed installation would not be likely to have "a significant effect on a European site" because there is no such site within 10 km.

C19.10 Countryside and Rights of Way Act 2000 (CROW 2000)

Section 85 duty concerning Areas of Outstanding Natural Beauty (AONB)
There is no AONB which could be affected by the Installation.

Section 28G Wildlife and Countryside Act 1981 (WCA 1981) duty concerning SSSIs
There is no SSSI which could be affected by the Installation.

Section 28 I WCA 1981 duty to consult English Nature/CCW
There is no SSSI within 2km that could be affected by the Installation.

C19.11 Environment Act 1995 – Section 7 (Pursuit of Conservation Objectives)

Consideration has been given to whether any additional requirements should be imposed in terms of the Agency's duty to have regard to the various conservation objectives set out in s 7 EA 1995, but it is felt that existing requirements are sufficient in this regard and no other appropriate requirements have been identified.

General

C19.12 Environment Act 1995 – Section 4 (Pursuit of Sustainable Development)

By Section 4 of the EA 1995, the Agency has a duty to contribute towards achieving sustainable development as considered appropriate by Ministers and set out in guidance issued to it. The relevant statutory guidance issued to the Agency by the Secretary of State for Environment, Food and Rural Affairs is *The Environment Agency's Objectives and Contribution to Sustainable Development: Statutory Guidance (December 2002)*. It is noted that this document:

"provides guidance to the Agency on such matters as the formulation of approaches that the Agency should take to its work, decisions about priorities for the Agency and the allocation of resources. It is not directly applicable to individual regulatory decisions of the Agency".

In respect of regulation of industrial pollution through the PPC Regulations, the Guidance refers in particular to the objective of setting permit conditions "in a consistent and proportionate fashion based on Best Available Techniques and taking into account all relevant matters...". The Agency considers that it has pursued the objectives set out in the Government's guidance, where relevant, and that there are no additional conditions that should be included in this Permit to take account of the Section 4 EA 1995 duty.

C19.13 PPC Regulations - Schedule 4, Part 2. para 13 (EIA Directive information)

No information concerning any Environmental Impact Assessment for the installation was supplied by the Applicant in response to Question B5.1 in the PPC Application Form.

C19.14 Human Rights Act 1998 (HRA 1998)

The Agency has considered potential interference with Convention rights in reaching its decision and considers that its decision is compatible with its duties under the Human Rights Act 1998. The Agency does not accept that Convention rights are engaged in the present case.

C20 Improvement Condition Justification

A summary of the improvement conditions justified throughout this decision document is provided in Appendix 2.

APPENDIX 1 – Consultee responses

Summary of consultation responses received and the way in which they have been taken in to account in the determination process:

Table 5: Summary of consultee responses

Brief summary of issues raised	Response received from [consultee]	Summary of actions taken or show how this has been covered
Completed the request for consultation information from local authorities. Raised issues of noise caused by movement of vehicles on the site at night and noise caused by mechanical parts which were quickly rectified by the company. Details 13 complaints against the company including dust and odour over the period 1995-1999 and noise from vehicles and machinery from 1995 to 2003.	Powys County Council	A noise management plan has been added as an improvement condition (IP4).
Standard letter. Controls should prevent contamination of water for irrigation, animals or fish farming. Process changes should not compromise microbial safety. Installation unlikely to have unacceptable effect on human food chain.	Food Standards Agency	No action taken as issues are already addressed by standard permit conditions.
Have reported 2 Pollution Incidents: 1. Discharge to foul sewer of "significant" volume of molasses. Resulted in closure of receiving SWT – not prosecuted. 2 Spillage of 1000l of Methionine into surface water drain and ultimately to the River Severn from poorly banded storage tank. WTW forced to stop abstracting water and seek alternative sources.	Severn Trent Water	The IBC container being filled in the liquid feed plant overflowed, this has been remedied as the liquid feed plant is no longer in existence The automatic pump chamber for surface water has been replaced with an manual pump mechanism. The chamber now has a visual warning light to indicate when it should be manually emptied; this should prevent contaminating materials being automatically discharged into the surface water drains Improvement conditions added to provide a risk assessment of storage tanks and improve chemical storage spill containment
Raised concerns that the "Fat tank" and "Gas oil tank" listed in table 4.2 of the site report appear not to be banded.	Welsh Assembly Government	Covered by improvement condition to review risks from such storage

APPENDIX 2 – Improvement Conditions Justification

Table 6: Summary of Improvement Conditions

IP Ref	Improvement Condition	Justification
1.	The Operator shall undertake a risk assessment of the tanks, bunds and concrete surrounding liquids whose spillage could be harmful to the environment. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.11 July 2003. A written report summarising the findings with proposals for improvements, if any, and timescales shall be submitted to the Agency.	IBC storage containers have been identified by the Operator as being outside bunded and designated areas There have been spillages of materials in the past which have had a significant environmental impact. Once the gas oil tank and underground pipework has been relocated the tank should be assessed to ensure that it poses no risk to the environment.
2.	The Operator shall determine flow and releases of particulates from A7 over representative operating conditions. A written report of this determination shall be submitted to the Agency including an assessment of whether continuous indicative monitoring of emissions is required in accordance with Secretary of State's Process Guidance Note 6/26 (05). The report shall include, where appropriate, proposals and timescales for the installation of such monitoring.	This will enable the assessment of whether any additional monitoring or ELVs are required for release point A7.
3.	The Operator shall review the techniques used to minimise emissions of particulates to air from points A3, A4, A5, A6 and A7. A written report of this review with proposals for improvements to achieve the benchmark limits in the Secretary of States process guidance note 6/26 (05) shall be submitted to the Agency.	Emissions from A4 and A6 exceed the relevant benchmarks for particulate from coolers and other plant. Furthermore, there is considerable variability in emissions from A3-A6, which are from similar source types and abatement systems. This suggests that there are underlying issues regarding the plant or how it is operated. This IP is therefore aimed at addressing these issues.
4.	The Operator shall submit a noise management plan in writing to the Agency, covering all noise emissions from the installation, having regard to the Agency Guidance Note IPPC H3 (Part 2), Appendix 4 (September 2002).	The Local Authority has received complaints about noise within the last 2 years.
5.	The Operator shall review and where necessary revise their documented system of environmental management techniques having regard to the Agency Guidance Note IPPC S6.10 Section 2.3, August 2003, and shall submit a summary of any changes to the Agency in writing.	The review is required to ensure that the EMS fully reflects the environmental priorities at the installation and also reinforces the importance of management with the PPC permit.
6.	The Operator shall develop a written Site Closure Plan with regard to the requirements set out in Section 2.11 of the Agency Guidance Note IPPC S6.10, August 2003. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing	The applicant does not have a site closure plan

APPLICATION SITE REPORT - EVALUATION CHECKLIST

Application Reference:		Site Name/Identifier: Wynnstay Mill
Applicant: Wynnstay Group plc		
Report Date/Version:		

Key Data Gaps in ASR for inclusion into Schedule 4 Notice or request for further information.	
1.	Is there an effective environmental management system implemented at the installation
2.	The Operator shall provide details of any measures undertaken to remediate any deterioration of land quality associated with the potentially polluting incidents identified at Appendix C2
3.	The applicant shall describe the specification of the gas oil storage tank

Key issues in ASR to be addressed in the Site Protection and Monitoring Programme.	
1.	Investigation of the integrity of the sub surface drainage system
2.	Integrity testing of the primary, secondary and tertiary pollution prevention measures
3.	Collection of reference data in those areas of the installation in which a reasonable possibility of pollution is found to exist.

Step 1- Environmental Setting and Pollution History		
Relevant Sections in ASR Template: 3.0 Site Setting and Sources of Desk Based Research Information 4.0 Site Reconnaissance 6.1 Geology and Hydrogeology 6.2 Surface Water Feature		6.3 Results of Previous Investigations 6.4 Other Receptors 6.5 Pollution History 6.6 Site Zoning
Has the following information been submitted and considered?		
Item – Key Information and Questions	Yes/No	Comments – missing information to be requested
Site Plans – General location, Grid Ref., Site / Installation Boundary, Installation layout (location of key plant & storage areas), scale & key	Yes	Layout plans, grid reference, installation boundary and layout provided in the application
Site Setting – surrounding land use, topography	Yes	Located at Eagle House, Llansantffraid, Powys. One hectare –aerial view provided at Figure 1a North – retail depot beyond which A495, agricultural land and residential land use East – Car parking areas and canteen, beyond which a restaurant and residential properties West – Offices, car park and garage, beyond which retail unit and residential housing South – Arable agricultural land extending to the River Cain – 250m from site. Culverted watercourse runs under site and flows to the River Cain.
Geology – drift & solid maps, any on-site information	Yes	No Intrusive SI undertaken. Information based on BGS datasheets & information provided by the Agency Made Ground Undifferentiated River Terrace Deposits Ordovician Allt-tair-ffynnon Mudstone Formation

Hydrogeology - Aquifer status (minor / major/ non), water quality, depth to groundwater, Source protection zones (SPZ), water abstractions	Yes	Site located within minor aquifer with soils of variable permeability
Hydrology – location of surface water (river/ lakes etc), quality status, water abstractions	Yes	No surfacewater courses present at the site Culverted watercourse below the site River Cain located 250m south
Hardstanding – location, condition, type (i.e. sulphate/solvent resistant concrete/ sealants used & maintenance), age, integrity	Yes	Section 4.3. Described as having no cracks, and is untreated.
Site Drainage – effluent / product transfer / surface water / sewer, open to ground/below ground, presence of culverts, interceptors/ soakaways / sumps (construction details)		Surface and foul drainage plans provided
Environmental Consents, licenses, discharge consents, authorisations, permits and designations for the site & local area		Provided in Envirocheck Report
Proximity of sensitive habitats or species identified		Provided in Envirocheck Report
Site history – previous potential sources of land contamination	No	Section 5.1 identifies previous land use as railway workings and brewery, with potential presence of associated contaminants, including oil and diesel.
Records of accidental releases or spills – location, products, volume, remedial measures undertaken	Yes	Allimet (2000), fat (2004) and sheep supplement caused by damage to storage tank, failure of spill containment and the separation of a pipe from the storage vessel respectively. Only spillage of allimet not contained, which caused pollution of surface watercourse. Remedial measures undertaken to mitigate against further incidents, including installation of an interceptorm pallet storage arrangements modified, pipe to tanks padlocked and coupling of pipe to sheep supplement tank welded.
Site reconnaissance – visual or olfactory evidence of issues at the site- bunding, hardstanding condition etc	Yes	Provided at section 4.0. No visual or olfactory evidence of contamination described within the report.

Key Question: From the ASR, can a confident and quantified assessment be made of the adequately sets out the site's environmental setting and pollution history?	Yes	Oil and hydrocarbon contamination identified. Contaminants not identified by the applicant may also include; Railway: heavy metals. pesticides, herbicides Brewery: heavy metals, pesticides, solvents
Key Question : Are intrusive investigations required to ascertain the site's environmental setting? (E.g. Ambiguous geological conditions that could impact contaminant migration.)	No	
Key Question : Has a site plan(s) been submitted which clearly defines the site of the installation and the installation layout? Does it include an appropriate scale ?	Yes	

Step 2 – Identify Potentially Polluting Substances

Relevant Sections in ASR Template: 5.0 Assessment of Pollution Potential 5.1 Polluting Substances and Relevant Activities		
Has the following information been submitted ?		
Item – Key Information and Questions		
• Identification of possible polluting substances that could already be in the land – <i>site history including previous site uses and applicant operations no longer undertaken</i>	Yes	Previous land uses included brewery and railway workings
• Identification of possible polluting substances – <i>raw materials, interim products, end products, wastes. Identification of current substances used previously and new substances</i>		Molasses – 80 tonnes storage pit Molasses holding tank – 10 toinned Fat tank – 45 tonnes Allmet tanks – 15 tonnes Bioadd tank – 6 tonnes Bredol IBC – 1000 litres Innozym IBC – 1000 litres Oil tank (gas oil boiler) 10,000litres Traffic film remover (lorry wash IBC) – 1000 litres Traffic film remover (holding tank) -100 litre
• Potential polluting substance characteristics – <i>form (solid/liquid/gas), chemical behaviour, environmental fate, toxicology and potential degradation products (i.e. MSDS)</i>	No	Addressed in the response to the RFI
• Location of all potential pollutants (emission points)	Yes	Plans provided at Appendices A3-A6, and B1
• Volumes stored and used	Yes	Volumes stored only provided

Key Question: Are you confident that the applicant has identified all substances in on or under the land that could have arisen from materials used or produced at the permitted site (or are likely to be used or produced in the future) ?	Yes	
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Step 3 – Identify Pollution Prevention Measures			
Relevant sections in ASR Template			
5.0 Assessment of Pollution Potential			
5.2 Preventative Measures			
Has the following information been submitted ?			
Item – Key Information and Questions	Yes/No	Comments – missing information to be requested	
• For all the potential emission points what pollution prevention measures are in place?	Yes		
• Primary measures – tank, IBC, pipe etc containing substance. Are these above or below ground level?	Yes		
• Secondary Measures – bunding etc designed to retain the substance in the vent of the primary measure failing. Bunds must have adequate volume (i.e. 110%), construction materials for sides and base of bund(suitable and resistant to potential pollutants?)	Yes	No secondary containment of the fat, molasses, gas oil tank and traffic fill holding tank – addressed in SPMF	
• Tertiary Measures – additional measures to contain spillage – i.e. interceptor, hard standing etc	Yes	Section 4.3 – no cracks identified, though not treated.	
• Site zoning – have all relevant activities and associated zones been identified (based on locations & properties of potential pollutants emission points). Table 2a/b should indicate these.	Yes	Identified at tables 2a and 2b	
Key Question: Has the applicant identified all the potential emission points ?	Yes		
Key Question: Has the applicant identified all the pollution prevention measures ?	Yes		

Step 4 – Assess the effectiveness of the Pollution Prevention Measures		
Relevant sections in ASR Template 5.0 Assessment of Pollution Potential 5.3 Assessment of the Likelihood of Pollution		
Has the following information been submitted ?		
Item – Key Information and Questions	Yes/No	Comments – missing information to be requested
Assessment of the likelihood of pollution (Table 2a/b) (To be completed for each relevant activity)		
Is there bulk storage of liquid chemicals or and other potentially polluting substances or high volume through put of polluting substances ?	Yes	Bulk storage of molasses in the molasses pit and the molasses holding tank Fat Alimet Bioadd Bredol Innozym Gas oil Traffic film remover More detailed inventory of raw materials provided at Appenix D1
a) Do preventative measures exist for each relevant activity?	Yes	Though not satisfactory
b) Are preventative measures adequate prevent the emission of substances to land? <i>Do the preventative measures comply with the indicative requirements contained in Box 5 or other equally applicable site specific measures to control potential emissions to land?</i>	No	More particularly the fat tank, the gas oil, the traffic film remover tanks

Tailmet (2000) , fat (2004) and sheep supplement (2005) spillages caused by damage to storage tank, failure of spill containment and the separation of a pipe from the storage vessel respectively. Only spillage of allmet not contained, which caused pollution of surface watercourse. Remedial measures undertaken to mitigate against further incidents, including installation of an interceptor pallet storage arrangements modified, pipe to tanks padlocked and coupling of pipe to sheep supplement tank welded. No written reports of the remediation works undertaken		• c) Does the applicant have NO record of pollution incidents or spills from the relevant activities to be permitted? <i>This question can be ignored if the applicant can demonstrate that adequate remediation of any pollution incidents or spills has taken place. This will require the production of a full validation report of any remedial work undertaken.</i>
Address in SPMP	No	• d) Are there proposals to conduct integrity testing of preventative measures?
To be addressed in the Permit	No	• e) Is there an adequate documented management system to demonstrate operator management and competence with the relevant activity?
Though information is provided in different format	No	• Use of Table 2 a/b to present the data?
Little and reasonable possibilities of pollution identified for the identified potentially polluting activities	Yes Yes	Key Question: Has the applicant made the case whether there is either: <i>little likelihood that pollution or leaks to ground will occur during the future life of the installation;</i> or there is: <i>a reasonable possibility that there is potential for current or future pollution of the land from the installation.</i> For each of the relevant activities at the installation.
Areas in which a reasonable possibility of pollution are identified in plans	No	Key Question: Do you agree with this assessment for all relevant activities?

Step 5 – Conceptual Site Model (CSM)		
Relevant sections in ASR Template 6.0 Conceptual site model 6.7 Summary of Conceptual Site Model		
Has the following information been submitted ?		
<i>Item – Key Information and Questions</i>	<i>Yes/No</i>	<i>Comments – missing information to be requested</i>
Description of sources – to include information on potential pollutants and containment measures identified under steps 1, 2 & 3	Yes	
Description of pathways – to include information on natural (geological setting) and artificial pathways (sumps, hardstanding, above or below ground drainage, bunding etc) described under steps 1, 3 & 4	Yes	
Description of potential receptors – to include information on sensitive potential receptors identified under step1	Yes	
Key Question : Does the CSM identify all the potential site specific potential receptors including the underlying land ?	Yes	
Key Question : Is there an adequate conceptual site model as shown in Box 7 of the H7 that describes known facts and assumptions about potential pollutants in, on or under the land for each identified zone ?	No	Adequate conceptual site model not provided, though information to allow an assessment of the likelihood of pollution using the source-pathway-receptor methodology is provided

Summary - Application Site Report - Decision Sheet

Situation			
Tick	✓	Information supplied is inadequate, permit can not be determined without further information – please see comments above, and if necessary, attached memo detailing proposed contents of Schedule 4 Information Notice.	
		Information is adequate Case made that there is little likelihood that pollution or leaks to ground will occur during the future life of the installation. No need to collect reference data in the post permit Site Protection and Monitoring Programme Determine permit Apply Conditions: 2.1.2, 2.10.9, 3.1.7, 4.1.7 (little likelihood), 5.1.4	
	✓	Information is adequate Case made that there is a reasonable possibility that there is potential for current or future pollution of the land from the installation. Reference data will need to be collected as part of the post permit Site Protection and Monitoring Programme Determine permit Apply conditions: 2.1.2, 2.10.9, 2.10.10, 2.10.10.1, 2.10.10.2, 3.1.7, 4.1.7 (reasonable possibility), 5.1.4 The activities of the installation present such a low risk of pollution of the land even if controls fail. Determine permit SPMP not required	
		Name of review officer: Lesley Gray	
		Date of review 13 September and 10 October	