

SUPPORTING INFORMATION - SECTION 3

3. NON-TECHNICAL SUMMARY

3.1 IN PROCESS CONTROLS

The installation manufactures compound animal feeds i.e. feeds which are suitable for consumption by an animal without further processing. The products manufactured are based upon core formulations of cereals (such as wheat and barley), soya, rapeseed and sugar beet, plus specific additives, such as mineral supplements. The processing is undertaken to a specific formulation on a batch basis, with the key stages being weighing, grinding, mixing, conditioning, pressing, cooling and coating.

Depending upon the specific formulation, the required feed materials/additives and minerals are weighed out prior to grinding to a uniform grist size. The ground materials are then transferred to the mixing stage of the process. Following this, most of the batches are conditioned through the addition of steam and molasses to improve the workability of the mix.

Some products are basically finished prior to conditioning such as; as meals mashes and coarse feeds, which includes whole cereals and flaked products supplied by other sites. These products bypass the conditioning and pelleting stage in the case of meals and mash, whilst the coarse product by passes the grinding stage prior to mixing joining the meals and mash. These finished products are then transferred to the bulk delivery plant from where the bulk delivery vehicles collect their requirements.

After conditioning, the hot mix is extruded through dies to produce pellets of various sizes. The hot products are then passed through a counter flow air cooler to reduce their temperature, causing them to harden and become durable. The majority of the pellets are subsequently coated in fat to complete the finished product. The pelleted product is used as feed for ruminant's i.e. dairy cows, beef and sheep and mono gastric animals such as pigs and poultry. The finished product then transferred to the bulk delivery plant from where the bulk delivery vehicles collect their requirements.

3.2 EMISSION CONTROL AND ABATEMENT

3.2.1 Point source emissions to air

Throughout the process appropriate controls, both manual and automated, are applied to ensure that emissions to air are minimised and where appropriate abated.

Suitable controls are in place for the handling of raw materials, wastes and products such that the potential for emissions from these activities is minimised.

A range of abatement systems are employed throughout the process to remove particulate matter:

- Dust filters and cyclones, as required, for the various stages of processing (grinding, mixing and cooling operations); and
- Local exhaust ventilation, where required.

3.2.2 Point source emissions to surface water.

There are minimal discharges of water from the process. Emissions are generated from various sources including yard surface run off, boiler blow down and general domestic effluent. Process and storm water effluent will be discharged, following solids separation by a full retention separator to surface waters. Domestic foul is treated in a conventional Klargester the liquids being discharged to the water course through the site drainage system.

3.2.3 Point source emissions to groundwater

There are no List I or List II substances or any other substance released from the site to groundwater. Further details regarding the groundwater regime are provided in section 2 The Application Site Report.

3.2.4 Fugitive emissions to air

Management and plant controls are in place for fugitive emissions to air. These controls include:

- Planned preventative and reactive maintenance programmes to minimise leaks from the process;
- The storage and maintenance of dusty materials within enclosed or covered areas (such the bulk flat store for bulk supplies and enclosed bins for minerals and materials about to be blended), primary packaging for packaged materials and waste skips for waste);
- The use of abatement equipment;
- Effective housekeeping; and
- External cleaning of the process building and stockyards.

3.2.5 Fugitive emissions to surface water and groundwater

The site has been designed to limit the risk of substances inadvertently entering surface water, foul drainage systems or groundwater. Wherever possible, chemicals are stored in appropriate containers (such as the supplier's primary packaging or bulk storage tanks) in bunded areas or on hard standing in storage areas. There are no open drains

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inside the process building and spill kits are available in the unlikely event that an environmental incident may occur.

3.2.6 Odour

Odorous raw materials are consumed in the process and the installation has the potential for causing odorous emissions primarily through various stages of the process such as receipt and cooling. l'Anson Bros Ltd employ a range of controls to reduce odorous emissions from the installation and undertake routine monitoring of odours at the boundary of the installation in the form of downstream "sniff testing". Modelling of potential odour emissions has been undertaken see section 4.

3.3 MANAGEMENT

The site has an Environmental Management System (EMS) which is designed to ensure that environmental management has a high priority within the site's operations. The system addresses the appropriate design, operation and maintenance of process plant, and includes details of staff training. The EMS is under constant review so that it remains relevant to the activities undertaken at the site. The site will be independently monitored.

3.4 RAW MATERIALS

3.4.1 Raw materials selection

Raw materials are selected to meet the requirements of the end market, with competitive drivers determining in some cases the specific materials consumed. All the raw materials used in the product are approved for use under the Feed Hygiene Regulations EU 1831/2003, the Animal Feed (England) Regulations 2010. As part of the EMS other raw materials consumed (such as process oils) are frequently reviewed, with the aims of these reviews being to improve process performance and to minimise potential environmental impact.

3.4.2 Waste minimisation (minimising the use of raw materials)

The installation is part of a large volume low margin industry where waste minimisation is fundamental for productivity and profitability, consequently the process is designed to minimise process losses and waste generation. The installation product yield on raw materials consumed is close to 100% (based on dry mass).

3.4.3 Water use

The installation will eventually consume approximately 45 m³ of water per day. The principal uses of water at the site are the mixing and conditioning processes, which

involves the injection of live steam. In addition small quantities of water are used for domestic applications.

3.5 WASTE HANDLING

The installation generates and subsequently handles only small quantities of waste. As part of the EMS these wastes are appropriately handled, segregated and stored on site according to type. The installation generates non-hazardous (general) waste and small quantities of hazardous (special) waste. The waste storage areas are appropriately designed and maintained. These areas have adequate capacity for the quantity of wastes generated.

3.6 WASTE RECOVERY OR DISPOSAL

In order to maximise production yields, where practical the installation recovers/reworks all out of specification work-in-progress. Appropriately licensed third parties are contracted to collect and dispose of and/or recover, off site, all of the site's waste.

I'Anson Bros Ltd have an ongoing programme to review potential opportunities to increase the recovery of usable materials from its waste streams.

3.7 ENERGY

I'Anson Bros Ltd are affiliated to Trading Bodies Climate Change Levy Agreement (CCLA) therefore detailed energy efficiency data is available. I'Anson Bros Ltd is committed to the implementation of appropriate cost-effective energy efficiency measures and, as part of a trade body initiative, has developed and is implementing an energy efficiency plan.

3.8 ACCIDENTS AND THEIR CONSEQUENCES

As part of the EMS, a formal system has been developed and implemented to manage accidents and abnormal operating situations, both major and minor. The site operates, on an ongoing basis, a preventative accident regime, which identifies, considers and develops appropriate plans to address a wide range of abnormal operating conditions and accident hazards scenarios.

3.9 NOISE AND VIBRATION

As part of the ongoing operating and maintenance programmes implemented by I'Anson Bros Ltd, noise assessments for key operational equipment are undertaken and

corrective action is taken in the event that a specific item of equipment is emitting an abnormal noise.

l'Anson Bros Ltd have developed a rolling programme of occupational exposure (OE) noise assessments on the site. A noise survey will be conducted after commissioning in order to identify noise levels, within the process building, classified as hearing protection zones. A noise impact survey has been undertaken as part of the planning process. See section 4.

3.10 MONITORING

Air: l'Anson Bros Ltd will undertake, regular monitoring of the emissions released to air from the principal point sources at the installation.

Water: Routine monitoring will not be undertaken of the releases to surface water, as there are no significant releases of effluent from the process.

Waste: All waste streams are recorded and reported to ensure compliance with Duty of Care and other regulations.

3.11 CLOSURE

l'Anson Bros Ltd have developed a detailed site closure plan within the existing EMS (Environmental management system).

3.12 INSTALLATION WIDE ISSUES

l'Anson Bros Ltd are the only operator within the installation and retains full control of any activities undertaken therein.

3.13 EMISSIONS INVENTORY AND BENCHMARK COMPARASON

Emission inventories are presented for releases to air, water and land. Where available a comparison of the releases with benchmarks has been included which demonstrates that the installation is compliant with applicable benchmarks.

3.14 IMPACTS

3.14.1 Impact assessment

Impact assessments are presented for releases to air, water and land. The installation is not predicted to have a deleterious impact on the environment.

3.14.2 Waste Management Licensing

The Waste Management Licensing Regulations 1994 are not applicable to the installation.

3.15 HABITATS

No sites of special scientific interest (SSSI) have been identified within 2 km of the installation.

The installation will have no impact upon SSSIs. It is envisaged that the activities undertaken by the installation will have an insignificant impact on any existing habitats.

3.16 ENVIRONMENTAL STATEMENTS HABITATS

There are no environmental statements relevant to the installation.

3.17 SPECIFIED WASTE MANAGEMENT ACTIVITIES

The installation is not applying to operate any specified waste management activities.

3.18 BAT ASSESSMENT

Where required under the guidance BAT assessments have been undertaken and are incorporated within the main application. Overall, the installation is and will operate in accordance with BAT.