



**APPLICATION FOR AN ENVIRONMENTAL PERMIT
UNDER THE ENVIRONMENTAL PERMITTING
(ENGLAND AND WALES) REGULATIONS 2016
(AS AMENDED)**

**ENVIRONMENTAL PERMITTING TECHNICAL
REQUIREMENTS**



**MINERS PARK, LLAY INDUSTRIAL ESTATE,
LLAY, WREXHAM**

**ECL Ref: ECL.088.01.01/EPTR
Version: Issue 1
May 2021**

TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. Overview	1
1.2. Facility Location	1
1.3. The Applicant	1
1.4. Pre-Application Discussion	2
2. BESPOKE WASTE OPERATION	3
2.1. Proposed Activities	3
3. MANAGEMENT TECHNIQUES	4
3.1. Technical Competence	4
3.2. Overview of Environmental Management System	4
3.3. Environmental Policy	4
3.4. Details of the Environmental Management System	5
4. OPERATING TECHNIQUES	9
4.1. Technical Standards	9
4.2. Proposed Waste Activities	9
4.3. Proposed Infrastructure and Drainage Arrangements	18
5. EMISSIONS	19
5.1. Point Source Emissions to Air – Proposed Arrangements	19
5.2. Point Source Emissions to Surface Water – Proposed Arrangements	19
5.3. Point Source Emissions to Sewer – Proposed Arrangements	19
5.4. Point Source Emissions to Land – Proposed Arrangements	19
5.5. Fugitive Emissions to Air	19
5.6. Fugitive Emissions to Surface Water, Sewer and Groundwater	20
6. GENERAL REQUIREMENTS	21
6.1. Dust Management	21
6.2. Odour Management	21
6.3. Noise Management	21
6.4. Pest Management	21
6.5. Fire Management	21
7. APPLICATION SITE CONDITION REPORT	23
8. MONITORING	24
8.1. Monitoring of Emissions to Air	24
8.2. Monitoring of Groundwater	24
8.3. Monitoring of Surface Water	24
8.4. Monitoring of Foul Water	24

TABLE OF CONTENTS

9. RESOURCE EFFICIENCY AND CLIMATE CHANGE	26
9.1. Energy Efficiency Measures	26
9.2. Energy Consumption	26
9.3. Climate Change Agreement	26
9.4. Raw Material Justification	27
9.5. Waste Minimisation and Benefits	27
10. COMPLIANCE WITH BAT CONCLUSIONS	29
10.1. Overview	29

APPENDICES

APPENDIX I	ENVIRONMENTAL POLICY
APPENDIX II	PROCESS FLOW SCHEMATIC
APPENDIX III	FLOW CHART
APPENDIX IV	TRADE EFFLUENT CONSENT

LIST OF FIGURES

Figure 1: Products – Baled Product	10
Figure 2: Bulk Product	11

LIST OF TABLES

Table 1: Proposed EWC to be Accepted	3
Table 2: Biological Testing Requirements	13
Table 3: Energy Consumption	26
Table 4: Raw Materials	27
Table 5: Waste Treatment BREF- General BAT Conclusions	30
Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements	34

ACRONYMS / TERMS USED IN THIS REPORT

AMP	Accident Management Plan
BAT	Best Available Techniques
BREF	Best Available Techniques Reference Document
CCA	Climate Change Agreement
CCTV	Closed Circuit Television
CLP	Classification, Labelling and Packaging
DGSA	Dangerous Goods Safety Advisor
DMP	Dust Management Plan
EA	Environment Agency
ECL	Environmental Compliance Limited
ELVs	End of Life Vehicles
EMS	Environmental Management System
EP Regulations	Environmental Permitting (England and Wales) Regulations 2016 as amended
EP	Environmental Permit
ERA	Environmental Risk Assessment
EWG	European Waste Catalogue
Ha	Hectares
IBC	Intermediate Bulk Container
IED	Industrial Emissions Directive
NGR	National Grid Reference
NRW	Natural Resources Wales
OS	Ordnance Survey
PPMR	Planned Preventative Maintenance Regime
SCC	Somatic Cell Counts
SCR	Application Site Condition Report
SEC	Specific Energy Consumption
SHEQ	Safety, Health, Environment and Quality
The Facility	Platts Agriculture Wood Waste Processing Facility
WAMITAB	Waste Management Industry Training and Advisory Board

1. INTRODUCTION

1.1. Overview

- 1.1.1. Environmental Compliance Limited (“ECL”) has been commissioned by Platts Agriculture Limited (“Platts”) to produce an Environmental Permit (“EP”) application to undertake a bespoke waste operation at their wood waste processing site, hereafter referred to as “the Facility”, located on Miners Park, Llay Industrial Estate, Llay, Wrexham LL12 0PJ.
- 1.1.2. Platts is proposing to accept and process approximately 60,000 tonnes per annum of non-hazardous wood waste at the Facility. The maximum daily receipt proposed is 300 tonnes to account for the varying cycles of trailer changeovers at the wide range of collection sites.
- 1.1.3. Animal bedding will be produced from clean, uncoated, and untreated waste wood only. Waste wood which has been previously coated will not be used to produce animal bedding and therefore the two waste wood types will not be mixed.
- 1.1.4. Any previously coated waste wood will be stored entirely separately from the clean, uncoated, and untreated waste wood and will be pulverised to produce a cubicle conditioner for use in the agricultural livestock sector. The cubicle conditioner is important for animal welfare, acting to control moisture levels and keep animals clean and hygienic through application of a limited quantity (1 large cup) to the mat or mattress.

1.2. Facility Location

- 1.2.1. The Facility is located on Miners Road within Llay Industrial Estate which consists of industrial and commercial units surrounded predominately by rural land use. The Facility is centred on Ordinance Survey (“OS”) National Grid Reference (“NGR”) 332077 356370. The Facility will occupy an area of approximately 1.56 Hectares (“Ha”).
- 1.2.2. The exact location of the Facility and the proposed Environmental Permit Boundary (outlined in green) is indicated on the Site Location Plan (Drawing ECL.088.01.01-01), which is contained within Section 3 of this application submission.

1.3. The Applicant

- 1.3.1. The applicant is Platts Agriculture Limited formerly named R.A and C.E. Platt Limited. The company registration number is 01500964.
- 1.3.2. The Company formed in 1973 and is a market leading UK manufacturer and supplier of quality animal bedding and conditioner. Platts was awarded the Royal Warrant in 2018 as a mark of recognition for the supply of goods to Her Majesty the Queen.
- 1.3.3. Certain ambiguity within the regulations and cross referencing in the PAS 111 guidance document meant Platts believed they were operating within the requirements of the legislation. However, recent discussions have highlighted that they require an EP for their activities and therefore, a Permit application is being submitted.

- 1.3.4. Platts is proposing the operation of a bespoke waste facility for the storage and treatment of wood waste to manufacture animal bedding and cubicle conditioner for use within the agricultural livestock sector.

1.4. Pre-Application Discussion

- 1.4.1. Pre-application advice was obtained from Steven White, Natural Resources Wales (“NRW”) Senior Waste Regulation Officer on the 9th July 2020 and confirmed that Platts would be required to apply for a bespoke Environmental Permit as no Standard Rule Permit allows for the treatment of the waste types proposed (See Table 1).
- 1.4.2. NRW advised that waste wood treated by veneers, glues, varnishes, and stains, among others, is unsuitable for use as animal bedding. However, it was confirmed that an Environmental Permit would allow for animal bedding to be produced from non-hazardous waste wood and virgin timber, where non-hazardous waste wood includes, waste wood from the arboriculture sector, packing waste, kiln dried scrap pallets, packing cases, cable drums and off-cuts from the manufacture of untreated wood products.
- 1.4.3. As a result of the pre-application advice received from NRW, clear distinctions have been made in the application between waste wood to be processed for animal bedding and waste wood to be processed for cubicle conditioner (See Sections 1.1 and 2.1 of this document).
- 1.4.4. Additionally, the pre-application advice also confirmed that WAMITAB Level 4 Medium Risk Operator Competence for Non-hazardous Waste Treatment and Transfer (601/8528/4) (MROC1) was the appropriate WAMITAB course. This is discussed in detail in Section 3.1. of this document.

2. BESPOKE WASTE OPERATION

2.1. Proposed Activities

2.1.1. Platts propose to undertake one Specified Waste Operation as follows:

- storage of non-hazardous waste wood with treatment limited to pulverising and removal of wood dust from clean wood waste for use as animal bedding material and, pulverising of treated wood waste to produce wood dust for use as a cubicle conditioner within the agricultural livestock sector.

2.1.2. Platts propose to accept 60,000 tonnes of non-hazardous wood waste per annum at the Facility. The proposed European Waste Catalogue (“EWC”) codes to be accepted and processed are detailed in Table 1.

Table 1: Proposed EWC to be Accepted

Code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	Wastes from agriculture, horticulture, forestry, hunting and fishing
02 01 07	Wastes from forestry
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD
03 01	Wastes from wood processing and the production of panels and furniture
03 01 05	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 0 4
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCATED SOIL FROM CONTAMINATED SITES)
17 02	Wood, glass and plastic
17 02 01	Wood

2.1.3. Consequently, the waste management operations to be carried out at the Facility as specified in Annex I and Annex II of the Waste Framework Directive 2008 are detailed below:

- **R3:** Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes); and
- **R13:** Storage pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).

2.1.4. As part of the Permit application, it is proposed that the processed wood waste material should be considered a ‘product’ and should no longer be considered a waste based on the PAS111 standards and protocols. This is discussed in more detail in Section 4.2 of this EPTR document.

3. MANAGEMENT TECHNIQUES

3.1. Technical Competence

- 3.1.1. Under the EP Regulations, the activities are classified as a relevant waste operation, and, accordingly, a Technically Competent Manager will be required. Mr Rob Wilson will fulfil this role. His Waste Management Industry Training and Advisory Board (“WAMITAB”) Learner ID for WAMITAB Level 4 Medium Risk Operator Competence for Non-hazardous Waste Treatment and Transfer (601/828/4) (MROC1) is: 5170474. It is understood that NRW has access to the WAMITAB database to view his registration.

3.2. Overview of Environmental Management System

- 3.2.1. Platts will operate their own in-house Environmental Management System (“EMS”) at the Facility which will address environmental aspects of the proposed activities. The EMS will be written in accordance with NRW guidance and associated toolkit and will adopt the Plan, Do, Check, Act approach.
- 3.2.2. Platts’ Managing Director will have overall responsibility for the Facility. Responsibility for environmental matters at the Facility rests with the Environmental Manager.
- 3.2.3. Platts will establish a documented EMS which:
- ensures compliance with all relevant legislation;
 - ensures compliance with the Facility’s Environmental Permit;
 - identifies, assesses and minimises the risks of pollution arising from the Facility’s activities;
 - comprises a range of written procedures that cover all aspects of the Facility’s activities;
 - identifies, sets, monitors and reviews environmental objectives and key performance indicators; and
 - includes a requirement to report annually on environmental performance, objectives, targets and future planned improvements.

3.3. Environmental Policy

- 3.3.1. A copy of Platts’ Environmental Policy is provided in Appendix I.

3.4. Details of the Environmental Management System

3.4.1. Plan

3.4.1.1. The planning element of the EMS will include:

- identification of environmental impacts and aspects associated with the Facility's activities, and assessing their significance; including an assessment of the potential environmental risks posed by the work of contractors;
- identification and evaluation of relevant legal and other relevant requirements;
- identification of environmental objectives and targets that will be focussed on reducing the impact of the identified significant environmental aspects;
- a series of risk assessments to cover a range of issues, including site operations, maintenance, accidents, training and records; and
- details of how Platts ensure that any relevant standards, guidance and codes of practice are met on an ongoing basis; and
- a Site Closure Plan to demonstrate how the Facility can be decommissioned in its current state to avoid any pollution risk and return the site of operation to a satisfactory state.

3.4.1.2. The outcomes of the above are:

- a comprehensive understanding of the potential and actual impacts of the permitted activities on the surrounding environment and people's health;
- the correct appropriate measures selected to manage environmental risks and prevent or minimise their effects so as not to cause pollution;
- a series of documented procedures covering all aspects of the Facility's activities; and
- a series of documented environmental objectives and targets, together with an action plan/development programme to ensure that these are met.

3.4.2. Implementation and Operation (Do)

3.4.2.1. This element will include:

- ensuring that EMS roles and responsibilities are clearly defined and documented, and that site staff are made aware of these;
- ensuring that the Facility is operated by suitably competent staff who have received the necessary training in all aspects of the plant's operation, including where contractors are used, ensuring that they are suitably competent; in this regard:
 - the skills and competencies necessary for key posts are documented; these key posts include contractors, those responsible for liaising with contractors and those purchasing equipment and materials,
 - training requirements are identified by means of a documented training needs analysis,
 - documented training records are kept and updated as required,
 - training specifically addressee's environmental awareness and environmental permit requirements, and
 - the requirement for ongoing/refresher training is identified;

- ensuring that there are site layout plans - including drainage plans - and that they are revised as required to reflect any changes at the Facility;
- ensuring that there are documented procedures covering internal and external communications;
- ensuring that there are procedures in place for staff and contractors to have access to the Facility's permit and management system requirements; with regard to contractors, ensuring that suitable instructions are provided with regard to protecting the environment whilst working on site;
- the establishment of a documented planned preventative maintenance regime ("PPMR") to ensure that all plant and site infrastructure are kept in suitable condition and operating effectively; this PPMR programme details what maintenance, tests and inspections need to be done and when; this also details the measures required to ensure continuing compliance with the permit conditions during maintenance/shutdown.
- The PPMR also:
 - identifies known or predictable malfunctions associated with the operations and the procedures, spare parts, tools and expertise required to deal with them,
 - includes a record of spare parts held, or details on where they can be sourced from, together with an assessment of how long they would take to obtain,
 - includes a defined procedure for identifying, reviewing and prioritising items of plant for which a preventative regime is appropriate,
 - includes equipment or plant whose failure could directly or indirectly lead to an impact on the environment or human health and 'non-productive' items,
 - ensure the necessary spare parts, tools, and competent staff are available prior to commencing maintenance;
- ensuring that there are documented procedures covering document control;
- ensuring that there are suitable documented record-keeping arrangements in place;
- ensuring that there are documented operational procedures and work instructions covering all aspects of the Facility's operation;
- ensuring that there are documented procedures that incorporate environmental issues into the control of process/equipment change, capital approval and purchasing policy;
- ensuring that there are documented procedures to address non-conformities/non-compliances and the associated corrective and preventative action; these will detail the means by which any such non-conformities/non-compliances are reported to management and the means by which they are reported to NRW;
- ensuring that there is a documented procedure for dealing with complaints; this includes requirements to ensure that:
 - an appropriate person deals with the complaint,
 - the complaint is properly recorded,
 - the complaint is properly investigated,
 - any action necessary to deal with the cause of the complaint is recorded,
 - the impact of the activity causing the problem is minimised,
 - steps are taken to ensure that the problem is not repeated,
 - details of any justified complaints are reported to senior management,

- that the complainant (or NRW, as appropriate) is responded to in writing,
 - if the complaint came via NRW, a suitable documented response is provided to NRW,
 - if the complaint has come from a neighbour or a member of the public, a suitable documented response is provided to the complainant, and, if the complaint is substantiated, a report is provided to NRW, and
 - the EMS is amended accordingly to reflect any changes;
- ensuring that there are documented procedures covering emergency preparedness and response; these will cover such incidents as major plant failures, significant spillages of potentially polluting substances, loss of mains electrical power etc.; these will be incorporated into an Accident Management Plan. Platts ensure that suitable measures are in place to communicate the Plan to all employees, management and contractors who work at the site; the Plan details:
 - the arrangements for response to an emergency, including defining specific responsibilities,
 - the measures for dealing with the consequences of an incident,
 - communicating with NRW and other relevant regulatory bodies,
 - communicating with the Facility's neighbours and the local community,
 - the measures for investigating incidents (and near-misses), including identifying suitable corrective action and following up implementation of that action,
 - the measures for recording incidents (and near-misses),
 - the measures for reporting incidents (and near misses) to Senior Management, and
 - the measures for reporting incidents to NRW;
- ensuring that there are documented procedures for carrying out internal audits; these describe how to schedule, conduct, report and manage internal audits;
- ensuring that there is a documented contingency plan in place that:
 - ensures compliance is maintained with all permit conditions and operating procedures during maintenance/shutdown at the Facility or elsewhere,
 - ensures that permitted storage limits are not exceeded and appropriate measures for waste storage and handling continue to be applied, and
 - includes ceasing the acceptance of waste unless a clearly defined method of recovery or disposal has been determined and sufficient permitted storage capacity is available.

3.4.3. The outcome of the above is evidence that day-to-day activities are taking place in accordance with the requirements of the EMS and the Facility's permit, specifically:

- that control measures and procedures are an integral part of the business operation;
- that the EMS is easy for staff to access, understand and use;
- that staff are suitably trained and competent to carry out procedures and control measures; and
- that the requirements of the EMS are effectively communicated to management, staff and contractors.

3.4.4. Check

3.4.4.1. This element includes:

- ensuring that all regulatory requirements in relation to monitoring and measurement are complied with, specifically:
 - the requirements relating to inspection and testing required under Environmental Permit and the associated procedures /work instructions,
 - the requirements relating to inspection and testing required under the applicable health and safety legislation and the associated procedures,
 - the requirements relating to the control of all inspection, measuring and test equipment relating to environmental requirements;
- on-going evaluation of compliance with environmental legal requirements, policy requirements and objectives and targets. Evaluation includes annual review of the legal register, regular site inspections and internal audit procedures;
- ensuring that non-conformities are recorded, investigated and appropriate corrective action is taken by the due date;
- ensuring that the necessary compliance is maintained including reporting and record-keeping required under the Environmental Permit;
- ensuring that internal audits are carried out in accordance with the documented procedures and that any audit actions are followed up; and
- ensuring that the results of all audits are made available to Senior Management.

3.4.4.2. The outcomes of the above will be:

- that checks are carried out to ensure that the EMS is being implemented as intended; and
- the necessary preventative and corrective actions are undertaken to minimise non-compliances.

3.4.5. Review

3.4.5.1. This element will include:

- an annual management review of the EMS to ensure that it is appropriate, fully implemented and current;
- a management review of the EMS when:
 - there are changes on site (in activities and/or plant/equipment),
 - if there is an accident, complaint or breach of permit conditions.
- an annual review of both individual and organisational training needs;
- ensuring that all changes to the EMS are properly recorded;
- an assessment of whether the Facility's objectives, and any targets, have been met and reported;
- a review of the Facility's objectives and targets, and, where appropriate, any revisions to these so as to effect continual improvement.

3.4.5.2. The outcomes of the above will be:

- the EMS is kept up to date, and
- the EMS is continually improved.

4. OPERATING TECHNIQUES

4.1. Technical Standards

4.1.1. **European Legislation** - The following European Legislation will be used to inform the variation application:

- the Industrial Emissions Directive (“IED”) is intended to be a single legislative instrument for permitting, compliance and enforcement of environmental legislation across all member states. The requirement of the IED will therefore be considered relevant at this time; and
- the Best Available Techniques Reference Document (“BREF”) for Waste Treatment (October 2018) will be considered as it covers a number of waste treatments including recovery and disposal of waste.

4.1.2. **National Legislation** – NRW implement the requirements of the IED via the EP Regulations and have provided a number of guidance documents to assist in the preparation of Environmental Permit applications and the ongoing management of permitted Facilities. Although the below guidance is applicable to Part A waste Installations, in order for the Facility to be operated to the highest standards, the guidance documents used in the preparation of this application are as follows:

- NRW’s ‘How to comply with your environmental permit’ (Version 8, October 2014); and
- Environment Agency (“EA”) Sector Guidance Note IPPC S5.06 ‘Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste’ (Issue 5, Date 2013). No equivalent NRW guidance is available at the time of writing.

4.2. Proposed Waste Activities

4.2.1. **Waste Codes to be Accepted at the Facility**

4.2.2. Platts propose to accept 60,000 tonnes of non-hazardous wood waste at the Facility. The proposed European Waste Catalogue (“EWC”) codes to be accepted and processed are detailed in Table 1 above.

4.2.3. **Process Description**

4.2.3.1. The detailed overall process flow schematic is provided in Appendix II of this document.

4.2.3.2. A detailed Site Layout Plan (Drawing ECL.088.01.01-02) has been submitted in Section 3 of this Environmental Permit application.

4.2.3.3. The different finished products sold by Platts are provided in Figures 1 and 2 below. Of the products presented below, only Fine Bed® is produced from treated wood waste streams. Please note the pellets are not produced at the Facility.

Figure 1: Products – Baled Product

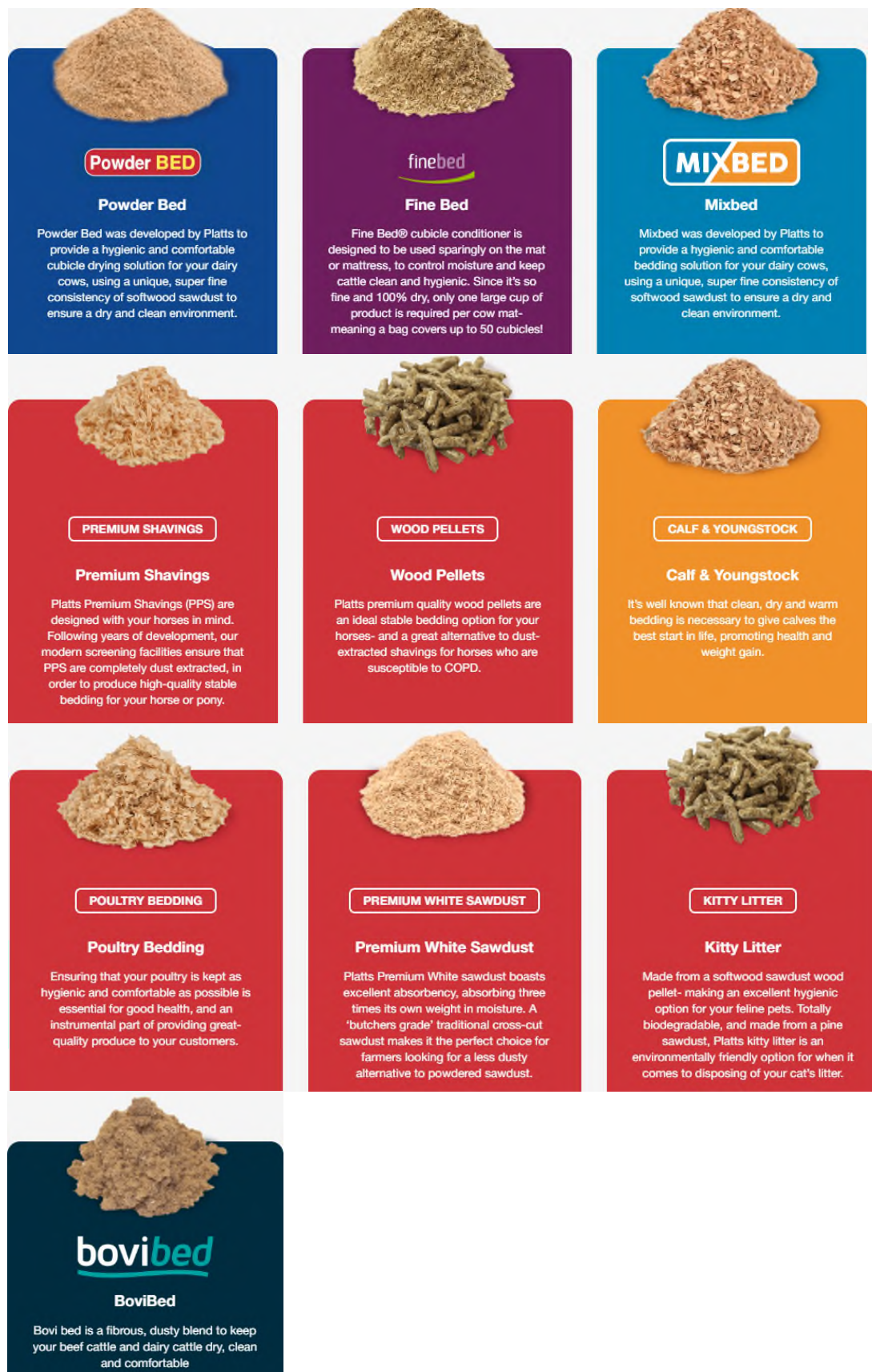


Figure 2: Bulk Product



4.2.4. Waste Pre-Acceptance Arrangements

- 4.2.4.1. Platts will put in place a fully documented waste pre-acceptance procedure, the purpose of which will be to ensure that wastes are subject to appropriate technical appraisal prior to acceptance at the site. In turn, this will ensure that unsuitable wastes are not accepted. These checks will be carried out before any decision is made to accept a waste.
- 4.2.4.2. Wood waste derived from or containing post-consumer wood waste, and timber that has been subject to pressure treatment with preservatives will **NOT** be accepted under any circumstances. The wood waste must only come from wood processing / wood manufacturing sites and where no pressured treated timber waste can enter the waste stream.
- 4.2.4.3. When a waste enquiry is received the following information must be provided in writing by the waste producer:
 - details of the waste producer, including address and contact details;
 - the specific process from which the waste derives; and
 - an indication of the waste streams produced, their quantity, physical form, composition, properties, classification and description; and
 - a WM3 assessment that details the above and includes analytical results of the wood waste material.
- 4.2.4.4. Pre-acceptance checks and subsequent assessments will be conducted. For every case, a representative sample will be obtained from the production process/current holder to compare against the description provided by the waste holder. The only exceptions to this will be if a sample and subsequent analysis has already been undertaken by a third party for the purposes of a WM3 assessment, or there is sufficient information provided on a product, such as on an adhesive or paint safety data sheet ("SDS") and a WM3 can then be undertaken prior to approval for acceptance.
- 4.2.4.5. Following characterisation of the waste, and confirmation of a match against the waste description, a technical assessment of the waste will be undertaken regarding its suitability for treatment at the Facility.

- 4.2.4.6. The Environmental Department will assess the waste producer's audit report. A record of the assessment will be kept, its conclusions, and any actions taken.
- 4.2.4.7. Where the audit report is partially incomplete or inadequate, the Environmental Department will request and obtain the required information (or another audit report) prior to accepting the waste.
- 4.2.4.8. Should the Technical Assessment be undertaken by a third party, Platts will:
- ensure that all details of the content of any audit tools or methodologies and assessment criteria used by that party are provided to Platts;
 - ensure that the methodology used by the third party meets Platts' own procedures in relation to pre-acceptance;
 - keep a summary report from the third party which will demonstrate that pre-acceptance and assessment has been conducted on waste from the relevant producer with regard to the Facility which contains the following and that will be updated should any information contained within it change:
 - confirmation of the producer types, waste types, containers etc.
 - confirm a composite waste classification, description, composition, and properties for each waste stream and container type destined for the Facility, derived from each of the pre-acceptance audits and with reference to the permitted wastes for the site,
 - confirmation of any issues that have been identified and what action has been taken with regard to the producers and wastes affected;
 - annually audit a random and representative cross-section of the other party's pre-acceptance checks to ensure both the quality of pre-acceptance checks, subsequent assessments, waste classification and descriptions; and
 - keep records of all audits and electronic records of the pre-acceptance report and assessment.
- 4.2.4.9. All analytical results of wood waste from suppliers will be reviewed against a 'library' of results to ensure there are consistent low levels of substance concentrations within the waste streams accepted. This will be the case for both animal bedding and cubicle conditioner waste streams. On-going review will help identify waste streams which may display elevated results for certain substances. This can be queried with suppliers and means of reducing such substance content can be identified, thereby consistently improving the finished product.
- 4.2.4.10. An overarching review of analysis results to date has been prepared as part of a Wood Waste Review (Document Reference ECL.088.01.01/WWR) contained within Section 10 of this application submission.
- 4.2.4.11. There is a clear distinction between sales and technical staff roles and responsibilities. In the case that non-technical sales staff are involved in waste enquiries, a final technical assessment prior to approval is made.
- 4.2.4.12. All records relating to pre-acceptance at the site will be kept for a minimum of five years at the Site Office. Electronic copies will be held on site to ensure direct access to those records for cross-reference and verification at the waste acceptance stage.

4.2.5. Sampling and Testing

- 4.2.5.1. The sampling and testing methodology has been informed by reviewing the Publicly Available Specification PAS111:2012 document commissioned by Waste and Resources Action Programme (“WRAP”) in collaboration with the British Standards Institute (“BSI”). The document was developed for the wood waste recycling industry sector to provide clarity on what may be deemed appropriate reuse of various wood waste streams.
- 4.2.5.2. Much of the PAS111 deals with waste derived from or containing post-consumer wood waste, and how it should be dealt with and processed for various end uses. Section 4.3.3 of the document refers to animal bedding and details that wood used for animal bedding should be tested in accordance with sections 6.3.1 and 6.3.2 of the PAS111 document.
- 4.2.5.3. These sections deal with the sampling and testing methodology and relate to wastes that contain post-consumer wood waste and potential physical contaminants such as concrete, grit, glass, metals, and plastics, none of which are relevant for the wood waste supplies that Platt’s propose to accept. Therefore, much of the sampling and testing methodology is not applicable to how Platt’s operate.
- 4.2.5.4. There is specific reference to the potential for pathogens to be present in recycled wood waste and that testing should be undertaken where recycled wood waste is used for animal bedding. Additionally, moisture content is a key aspect as elevated levels can accelerate the growth of mould and pathogens. It recommends the moisture content should be less than 30% by weight. Table 2 below repeats the biological testing requirements for wood waste outputs destined for animal bedding.

Table 2: Biological Testing Requirements

Parameter	Test Method	Unit	Upper Limit
Escherichia coli	BS ISO 16649-2	CFU/g fresh mass	1,000
Salmonella spp	Schedule 2, Part II of BS EN ISO 6579	25g fresh mass	Absent

- 4.2.5.5. Both biological and moisture testing is being undertaken for the bedding material and conditioner. Additionally, analytical suites covering metals, VOC’s, Phenols and PAH’s have been developed to assess the wide range of substances that may be present in the wood waste streams to ensure that substance concentrations are sufficiently low so as not to be deemed either a risk to the environment, human health, or animal welfare. The development of the suites has been informed by the analysis review work presented in Section 10 of the Application submission.
- 4.2.5.6. In order to generate more sample analysis results the largest suppliers of waste wood have been sampled on a weekly basis. This applies to the 10 largest suppliers that account for approximately 60% of the overall supplies. The review of the additional data will help inform the longer-term sampling and analysis requirements that will form the acceptance procedures.

- 4.2.5.7. It is envisaged that future sampling of wood from regular suppliers may be undertaken in two ways. Firstly, each load received will be sampled and the material held in a sealed container with mixing of the material on each addition from a new load. At the end of the month, a sample from the homogenised mix would be taken and sent for analysis. Secondly, each month a specific randomly selected trailer would be sampled and sent for analysis. This would provide spot checks on individual loads along with monthly averages. All results would be combined into the library of results.
- 4.2.5.8. Where supplies are less regular, i.e. not more than one trailer a month, then each load would be sampled and sent for analysis. Again, all results would be combined into the library of results.
- 4.2.5.9. These proposed sampling regimes will be subject to review of the analysis results currently being generated and in discussion and agreement with the regulator.
- 4.2.5.10. It is considered that following sampling and analysis, the processed material should be classified as a 'product' and no longer considered a waste based on the PAS111 standards and protocols. The results of analysis to date and interpretation of results against PAS111 and other industry standards are presented in the Wood Waste Review (ECL.088.01.01/WWR) contained in Section 10 of this application submission.
- 4.2.6. **Waste Acceptance Arrangements**
- 4.2.6.1. Platts will put in place a fully documented incoming waste acceptance procedure at the Facility, the primary purpose of which is confirm that characteristics of the incoming waste matches the information provided at the pre-acceptance stage.
- 4.2.6.2. The waste will be collected from the waste provider and transported to the Facility in Platt's own trailers, during which time, the waste will be under the control of Platt's trained drivers. On collection from the waste provider, Platt's drivers undertake loading checks (trailer, connection, canopy) to ensure the waste collected is in accordance with pre-acceptance stage and non-conforming waste is not transported to the Facility.
- 4.2.6.3. On arrival at the Facility, the trailers will be checked to ensure they are in good condition and the waste has been transported correctly. The trailers will then be weighed and paperwork tickets checked and the following information will be recorded:
- weight;
 - date of arrival on-site;
 - time;
 - original producers' details (or unique identifier); and
 - unique reference number.
- 4.2.6.4. Waste will only be accepted when there is sufficient capacity within the Facility and a clear defined method of recovery has been determined.
- 4.2.6.5. All documents are checked by the Environmental Department prior to the waste being accepted.

- 4.2.6.6. As each delivery has been visually checked on collection from the waste provider and has been under the control of Platt's own drivers during transport, a further visual inspection is not deemed to be required on arrival at the Facility. Opening the doors of the trailers at the waste acceptance stage would generate a dust emission and may lead to contamination of the wood waste if it were to be unloaded for inspection. Consequently, unloading of the wood waste and a further check for non-conforming waste will take place in the enclosed trailer unloading bay prior to waste processing.
- 4.2.6.7. Waste delivered to the Facility must be accompanied by a written description of the waste describing its composition and information specifying the original waste producer and process where required.
- 4.2.6.8. Platts will develop a procedure containing clear and unambiguous criteria for the rejection of wastes, together with a written procedure for tracking and reporting such non-conformance.
- 4.2.6.9. Non-conforming waste is described as any waste that:
- the Facility is not authorised to accept;
 - is not recorded on the accompanying waste documentation; or
 - would not be expected, for any other reason, to be present.
- 4.2.6.10. Any non-conforming waste observed will be removed off site and sent back to the supplier as soon as practically possible, however, such waste will only be stored in the Non-Conforming Waste Quarantine Area for a maximum of 5 working days.
- 4.2.6.11. There are two quarantine areas shown on the Site Layout Plan (Drawing ECL.088.01.01-02) which has been submitted as part of this application. Non-conforming wastes will be stored in the enclosed trailer in which they were delivered to the Facility. The trailer will be moved to the Non-Conforming Waste Quarantine Area in the external yard on impermeable concrete until its removal. The Quarantine Area required for the Fire Prevention Plan is named "Fire Prevention Plan Quarantine Area" and is stored on impermeable concrete in the external yard.
- 4.2.6.12. The supplier will be contacted without delay to inform them of the non-conforming waste and identify measures that can be implemented to prevent recurrence. NRW will also be informed as soon as practicable in the event of waste being rejected.
- 4.2.6.13. Back-up copies of electronic records will be maintained off site at Platts Head Office on Miners Road in Llay Industrial Estate.

4.2.7. **Waste Handling, Storage and Processing**

- 4.2.7.1. A detailed overall process flow schematic is provided in Appendix II of this document.
- 4.2.7.2. On arrival to site, and following vehicles reporting to the weighbridge office for waste acceptance checks to be undertaken, trailers containing waste will be issued with a unique reference number. This enables the waste to be tracked across the site, throughout the storage and the treatment processes.

- 4.2.7.3. Vehicles containing wastes will be directed by Platts personnel to the relevant storage area. The site storage areas are clearly marked and with clear limits in place for storage capacities in each area. These limits are defined within the Facility's Fire Prevention Plan (Document Reference ECL.088.01.01/FPP) which also sets out the separation distances, allowing vehicular and pedestrian access to storage areas at all times.
- 4.2.7.4. To ensure a safe storage operation, storage areas chosen are located away from sensitive receptors where possible and all storage areas are within the secured perimeter covered by security fencing and Closed-Circuit Television ("CCTV"). Storage areas on the site have impermeable surfacing and are located in such a way that the double handling of wastes is minimised.
- 4.2.7.5. Inspection of the storage areas takes place daily with particular attention paid to signs of damage to the trailers in which the waste is stored, and any deterioration in the impermeable surfacing. Any damage identified will be recorded in the site diary with appropriate actions taken.
- 4.2.7.6. All waste received at the Facility will be treated on a first in first out basis and will be stored for a maximum of seven working days before processing. Due to the Facility's proposed twenty-four-hour operation, this turnaround is likely to be much reduced.
- 4.2.7.7. Waste storage arrangements are also described within the Facility's Fire Prevention Plan (Document Reference ECL.088.01.01/FPP Issue 1) and illustrated on the Site Layout Plan (Drawing ECL.088.01.01-02) and Fire Prevention and Mitigation Plan (Drawing ECL.088.01.01-04) contained in the FPP.
- 4.2.7.8. Waste processing at the facility is limited to pulverisation of the waste wood and dust removal and takes place within the enclosed main building to minimise dust and noise emission.
- 4.2.7.9. Platts trailers are unloaded and wood waste inspected within the confines of the main building which is isolated from the drainage network. The waste wood is then fed into the process system. To ensure the 'clean' and 'treated' wood wastes are not mixed, the system is cleared between processing of the different waste types.
- 4.2.7.10. The flow chart is presented in Appendix III. In summary, to clear the process system, it is run dry i.e. it continues to run once empty. This acts to remove most of the waste wood from the system. Platts will ensure there is no residual material which could cause contamination by flushing the system with one bucket of the alternate waste type to be processed.
- 4.2.7.11. The system will be run dry following flushing with any output, including the 'flushed' output, treated as cubicle conditioner as it will contain a mixture of the treated and untreated waste types and will therefore not be suitable for use as animal bedding.
- 4.2.8. **Dispatch**
- 4.2.8.1. Platts aim to process the material as soon as possible to ensure rapid turnaround and minimal storage time on site. The wood waste will be stored no longer than 5 days prior to processing. All finished product will be removed from the Facility within three months.

- 4.2.8.2. All finished product will be weighed prior to being removed from the site. This will be achieved by the vehicles being weighed prior to loading and then prior to departure carrying such product over the weighbridge.

4.2.9. **Records**

- 4.2.9.1. A waste tracking system will be implemented which will hold all the information generated during the pre-acceptance, acceptance, storage, treatment, and removal off site.

- 4.2.9.2. Records are made and kept up to date on an ongoing basis to reflect deliveries, on-site treatment, and dispatches. The tracking system operates as a waste inventory control system and includes:

- date of arrival on-site;
- producers details;
- all previous holders;
- a unique reference number;
- pre-acceptance and acceptance analysis results;
- load/package type and size;
- intended treatment/disposal route;
- the nature and quantity of all wastes held on site (this includes all hazards);
- the physical location of the wastes in relation to the site layout plan;
- where the waste is in the designated disposal route; and
- identification of site staff who have taken any decisions regarding the acceptance or rejection of waste streams and the recovery or disposal options.

- 4.2.9.3. The reporting system can provide reports on the following:

- the total quantity of waste present on site at any one time;
- a breakdown of the waste quantities being stored pending on-site treatment, classified by treatment route;
- breakdown of waste quantities on site for storage pending onward transfer;
- breakdown of waste quantities by hazard classification;
- the physical locations of the waste in relation to the site layout plan. This will include a record of any movements to different locations on site, however, this would not be normal practice;
- a comparison of the quantity of waste stored on site against the total permitted to be stored; and
- a comparison of the time the waste has been stored on site against the permitted limit.

- 4.2.9.4. All records are held in hard copy and electronically within the office building located away from waste storage areas. A backup copy is maintained and stored off site at Platts' Head Office on Miners Road within Llay Industrial Estate. All digital records will be held for a maximum of 5 years.

4.3. Proposed Infrastructure and Drainage Arrangements

- 4.3.1. The Facility process and storage areas benefit from concrete hardstanding. The Facility is located within a secure compound, completely enclosed by metal palisade fencing and lockable entrance gates which are locked out of hours.
- 4.3.2. Platts propose to operate 24/7 excluding bank holidays and shutdowns. Therefore, the Facility will be manned during normal operations.
- 4.3.3. Platts hold a contract with a specialist security company who maintain the site's CCTV surveillance. Nominated personnel will be available to attend site out of normal working hours (9am-5pm) if needed.
- 4.3.4. The drainage arrangements at the Facility are illustrated on the Drainage Plan (Drawing ECL.088.01.01-06) which has been submitted as part of this application.
- 4.3.5. Rainwater runoff from the building guttering, downpipes and external yard surface run off will be channelled to the foul water drainage network as shown on the Drainage Plan.
- 4.3.6. Effluent derived from vehicle washing will be discharged to the public foul sewer under the Letter of Authorisation/Trade Effluent Consent issued to the Facility by Welsh Water and contained within Appendix IV of this document. The waste diluted detergent used in the vehicle washing will flow from the vehicle wash area into the site drainage system via a silt/oil interceptor before discharge into the main foul sewer as shown on the Drainage Plan.
- 4.3.7. An emergency spill procedure will be implemented to respond to any spillages. This procedure will be contained within the Facility's EMS. This is described in more detail in Section 5.
- 4.3.8. Platts will implement a regime of visual site condition checks to ensure that the infrastructure is maintained in good condition. The site condition inspection checks will be included within the EMS and will cover:
- condition and integrity of the impermeable concrete hardstanding;
 - condition and integrity of the site buildings, fences and gates;
 - condition and integrity of drainage arrangements;
 - condition and operation of site security measures, e.g. CCTV; and
 - condition and integrity of bunding.
- 4.3.9. The results of these checks and details of any remedial action and maintenance that may be required in order to ensure good condition will be recorded on an EMS Site Checks document.

5. EMISSIONS

5.1. Point Source Emissions to Air – Proposed Arrangements

5.1.1. There will be no point source emissions to air.

5.2. Point Source Emissions to Surface Water – Proposed Arrangements

5.2.1. There will be no point source emissions to surface water. Clean surface runoff will be discharged to the foul sewer drainage network.

5.3. Point Source Emissions to Sewer – Proposed Arrangements

5.3.1. In addition to the effluent from the site's welfare facilities and clean rainwater from site surfacing, the Facility is subject to a Letter of Authorisation/Trade Effluent Consent issued by Welsh Water, contained within Appendix IV of this document. The Consent provides authorisation to discharge trade effluent from vehicle washing into the public foul sewer via a silt/oil interceptor. This is designated as S1 on the Drainage Plan (Drawing ECL.088.01.01-06) contained in Section 3 of this application submission.

5.4. Point Source Emissions to Land – Proposed Arrangements

5.4.1. There will be no emissions to land.

5.5. Fugitive Emissions to Air

5.5.1. The potential sources of dust emissions from the proposed activities include:

- transportation of waste into the Facility;
- waste reception and weighing;
- storage of wood waste prior to processing;
- unloading of waste wood;
- processing activities;
- weighing and packaging;
- storage of finished product; and
- loading and dispatch of finished product.

5.5.2. In order to effectively control the potential fugitive emissions to prevent dust nuisance from being experienced by sensitive receptors, a Dust Management Plan ("DMP") has been prepared and will form part of the EMS. The DMP (Document Reference ECL.088.01.01/DMP) is contained in Section 9 of this application submission.

5.6. Fugitive Emissions to Surface Water, Sewer and Groundwater

- 5.6.1. Fugitive releases to groundwater will be prevented by conducting all operations, including the storage of unprocessed wood waste and finished product, unloading, processing and handling in areas sealed with an impervious barrier to prevent a pathway for migration to ground and groundwater.
- 5.6.2. The potentially polluting substances held at the Facility are as follows::
- 1,000l vehicle detergent – bunded IBC which is located externally; and
 - 2,500l diesel – integrally bunded tank which is located externally.
- 5.6.3. Plant and equipment will be subject to regular maintenance and servicing as per the Facility's PPMR contained in Section 7 of the application submission. This will ensure they are in good working order to reduce the likelihood of fuel leakage at the Facility.
- 5.6.4. Regular site inspections will be undertaken to observe any spillages and to guarantee the continued integrity of bunding and impermeable concrete surfacing. If remedial action is required, this will be undertaken immediately.
- 5.6.5. Any spillages at the Facility will be subject to the Facility's robust EMS which will contain a spill management procedure. This will prevent any potentially polluting materials from entering the Facility's drainage network. Any spillage of potentially polluting substances will be recorded in the Site Diary and NRW will be informed if the spillage is greater than 200 litres.
- 5.6.6. All employees will be suitably trained in all aspects of the EMS including spill response, such as the deployment of absorbent mats and drain covers. Spill kits will be strategically located, and contents regularly inspected and maintained.

6. GENERAL REQUIREMENTS

6.1. Dust Management

- 6.1.1. As described in Section 5.5 of this document, a Dust Management Plan (“DMP”) has been prepared to address and control the potential fugitive dust emission sources.
- 6.1.2. The DMP will form part of the EMS and will be reviewed annually to ensure the continuing effectiveness of the plan. The reviews will take account of compliance records, complaints history, site records and any recent sensitive developments on neighbouring land. The plan will be amended as necessary, including any changes to the control measures.
- 6.1.3. The DMP (Document Reference ECL.088.01.01/DMP) is contained in Section 9 of this application submission.

6.2. Odour Management

- 6.2.1. Platts is not proposing to accept any waste which is putrescible or likely to be odorous in nature. Consequently, an Odour Management Plan is not required as part of this application.

6.3. Noise Management

- 6.3.1. The Facility is located in a predominantly industrial setting within Llay Industrial Estate surrounded by numerous industrial and commercial units. Furthermore, all processing activities will be undertaken internally within the main building. The ERA (Document Reference ECL.088.01.01/ERA) contained in Section 5 of this submission has demonstrated that noise emissions are not considered to be significant. Consequently, a Noise Management Plan is not required as part of this application.

6.4. Pest Management

- 6.4.1. Due to the nature of waste to be accepted, the risk of the attraction of pests, such as rodents and flies, is deemed unlikely and through the implementation of control measures, the formation of pest habitats is also considered not to be significant as detailed in the ERA (Document Reference ECL.088.01.01/ERA). Consequently, a Pest Management Plan is not required as part of this application.

6.5. Fire Management

- 6.5.1. As per the requirements of NRW’s *‘Fire Prevention and Mitigation Plan Guidance – Waste Management’* (Version 2.0, August 2017), a Fire Prevention Plan (“FPP”) is required for Operators that store wood and wood composites (planks, boards, pallets, crates, sawdust, shavings, and chips) which are deemed by NRW as combustible waste materials.
- 6.5.2. Therefore, a Fire Prevention Plan (Document Reference ECL.088.01.01/FPP) has been prepared and is included in Section 8 of this application submission.

6.5.3. The Fire Prevention Plan will form part of the EMS and will be reviewed and updated annually or if any of the following occur:

- a fire event at the site;
- a change or review of legislation;
- if the site is instructed to do so by NRW; or
- if there are changes to the listed contacts contained within the document.

7. APPLICATION SITE CONDITION REPORT

- 7.1.** A Site Condition Report ("SCR") has been prepared to form part of the Environmental Permit application. The SCR (Document Reference ECL.088.01.01/SCR) is contained within Section 4 of this application submission.

8. MONITORING

8.1. Monitoring of Emissions to Air

- 8.1.1. There are no point source (i.e. process contributions) emissions to air proposed as part of this application. Consequently, no monitoring of emissions to air is proposed.

8.2. Monitoring of Groundwater

- 8.2.1. Fugitive releases to the groundwater will be prevented by conducting all operations, including the unloading of deliveries, storage of waste materials, processing and handling in areas sealed with an impervious barrier to prevent a pathway for migration to ground or groundwater. Consequently, no monitoring of groundwater is proposed.

8.3. Monitoring of Surface Water

- 8.3.1. There will be no point source (i.e., process contribution) to surface water. Only clean surface water runoff (rainwater) will be discharged to the foul sewer drainage network. Therefore, no monitoring of surface water is proposed.

8.4. Monitoring of Foul Water

- 8.4.1. In addition to the effluent from the site's welfare facilities and clean rainwater from site surfacing, the Facility is subject to a Letter of Authorisation/Trade Effluent Consent (contained within Appendix IV of this document) which provides authorisation to discharge trade effluent from vehicle washing into the public foul sewer under the following conditions:
1. The Premises from which the trade effluent may be discharged is: Platts Agriculture Ltd, Lay Industrial Estate, Llay, LL12 0PJ;
 2. The trade effluent to be discharged is derived from vehicle washing;
 3. The maximum volume of trade effluent that may be discharged shall not exceed 2.4m³ per day;
 4. The highest rate at which the trade effluent may be discharged shall not exceed 0.31l/sec;
 5. The trade effluent is expected to contain traces of suspended solids and traces of the detergents, all heavily diluted, biodegradable, and non-acidic. No gross solids may be discharged to sewer;
 6. The pH of the effluent must be between 5 and 10;
 7. There must be no visible signs of oil or grease in the discharge;
 8. The wastewater must be discharged to the public sewer via a Silt/Oil Interceptor tank. The tank must be maintained regularly and maintenance records including Duty of Care paperwork must be kept available for inspection on request;
 9. The discharge must be made to foul sewer only with no risk of contamination of any surface water drainage;
 10. Flows must be introduced into the public sewer in such a way it will not affect the free flow of its contents, for example, settlement of suspended solids surcharging upstream;
 11. A three metre gravity section must be incorporated into the design before

connection to the public sewer should the discharge be pumped;

12. There will be no attempt to identify the volumes of domestic sewage and trade effluent for charging purposes. Both volumes will be discharged at the current domestic rate with no minimum charge for trade effluent; and
13. The permission is given on the understanding that:
 - a. It may be reviewed from time to time in accordance with the frequency applying in respect of a trade effluent consent issued under the Water Industry Act 1991, section 124;
 - b. Dwr Cymru-Welsh Water may review its Trade Effluent Policy and require a review of this permission subject to the restrictions in a) above; and
 - c. If the nature of the discharge is changed then Dwr Cymru-Welsh Water must be informed of this and shall be entitled to review the permission.

8.4.2. As a result of the risk management measures outlined in the Environmental Risk Assessment (Document Reference ECL.088.01.01/ERA), and the Trade Effluent Consent Conditions which will be adhered to by Platts, the risk of contamination to the Welsh Water Effluent Treatment Plant and subsequently controlled waters is considered not significant. Therefore, no monitoring of foul water is proposed.

9. RESOURCE EFFICIENCY AND CLIMATE CHANGE

9.1. Energy Efficiency Measures

- 9.1.1. A number of energy efficiency measures will be implemented at the Facility, such as:
- ensuring regular inspection and maintenance of equipment and plant to achieve optimum efficiency. For example, frequent lubrication of equipment to avoid high friction losses. This will be contained within the PPMR as part of the EMS;
 - optimising start-up time, power down time and equipment sequencing;
 - optimising operational planning to streamline equipment and plant use;
 - all lights and equipment will be turned off when not in use; and
 - employees will be trained in the importance of energy management and basic energy saving practices.
- 9.1.2. Energy use will be monitored monthly to produce an energy balance record and any opportunities for energy efficiency improvement will be addressed as part of the EMS.

9.2. Energy Consumption

- 9.2.1. It is estimated that approximately 1,500 MWh of electricity will be consumed for general power on site, such as lighting, for the operation of equipment and for use within the main process building and office.
- 9.2.2. Table 3 below provides the basic energy data in accordance with BAT 1 of Section 2.7.2. of SGN 5.06.

Table 3: Energy Consumption

Energy Source	Estimated Annual Quantity (MWh)	Primary Annual Energy (MWh)	CO ₂ Released Per Annum (tonnes)
Electricity	1,500	3,600	598

Note to Table:

- Conversion factor for delivered energy to primary = 2.4; and
- CO₂ conversion factors used from EA H1 Global Warming Potential Guidance Online – Electricity = 0.166 tonnes/MWh, Gas oil (diesel) = 0.25 tonnes per MWh.

9.3. Climate Change Agreement

- 9.3.1. The Facility is not subject to a Climate Change Agreement (“CCA”). The basic energy requirements, in addition to the sector specific energy requirements set out in the relevant technical guidance, have been adopted as outlined in Section 9.1 above.

9.4. Raw Material Justification

- 9.4.1. In addition to the wood waste to be accepted, the raw materials associated with the proposed activity are detailed in Table 4 below.

Table 4: Raw Materials

Substance	Storage Vessel	Maximum Volume Stored on Site (l)
Vehicle Detergent	IBC	1000
Diesel	Integrally bunded tank	2500

- 9.4.2. The Facility's EMS will include a procedure for the annual review of new developments in raw materials and for the implementation of any suitable ones with an improved environmental profile.

9.5. Waste Minimisation and Benefits

- 9.5.1. The proposed activities to be undertaken are based on the application of the waste hierarchy and in particular, waste avoidance. All waste materials will be delivered to the Facility with the aim of recovery to produce a product. No waste is produced as a result of the process and Platts maximise the reuse of packaging wherever possible.
- 9.5.2. There are various benefits of using conditioner as opposed to bedding – transport, bedding volume, reduced waste, reduced air quality impacts from reduced transport, material re-use and improved health conditions for animals.
- 9.5.3. The cubicle conditioner is highly absorbent, it aids in the maintenance of the sanitary conditions in livestock cubicles that are fitted with rubber mats/mattresses. The conditioner keeps cows clean and dry. The theory is that by keeping the mat dry with no moisture then this aids in the control of environmental mastitis, prevents hock rubbing and increases lying time, resulting in increased milk yields and improved Somatic Cell Counts ("SCC").
- 9.5.4. SCC is an indicator of quality of milk – specifically, its low likeliness to contain harmful bacteria, and thus its high food safety. White blood cells constitute most somatic cells in question. The number of somatic cells increases in response to pathogenic bacteria like staphylococcus aureus, a cause of mastitis.
- 9.5.5. Mastitis remains the most common and costly disease in milk production. It is not only responsible for severe financial losses to farmers from antibiotic treatment, discarded milk, financial penalties, reduced lactation yield following an infection and increased milking times, but it also represents a significant threat to animal welfare, resulting in discomfort, pain and premature culling. Current treatment methods of using antibiotics are not always effective as bacteria become resistant.
- 9.5.6. Traditional animal bedding like straw can exacerbate an existing problem. Damp and badly managed straw can have a high total bacteria count, especially streptococcus uberis. This can be due to its origin, method of production, contamination during storage/handling and a high moisture content. As straw has less absorbency it can result in increased cases of

environmental mastitis.

- 9.5.7. Higher moisture content of other bedding material, like fresh virgin sawdust, increases the likelihood of fermentation, resulting in elevated bacteria counts even before it reaches the cattle sheds. Foot disease and the possibility of pain and infection caused from hock rubbing can occur from the use of materials such as oat husks, paper crumb, chopped recycled pallets/wood chip.
- 9.5.8. The cubicle conditioner is non-abrasive to the skin and hocks of cattle, unlike other bedding products such as lime or calcium hypochlorate which can cause cracking of hooves and skin, burning of the udder, as well as becoming slippery when wet.

10. COMPLIANCE WITH BAT CONCLUSIONS

10.1. Overview

- 10.1.1. It is considered that the techniques that will be in use at the proposed Facility will constitute Best Available Techniques ("BAT") and will be appropriate and proportionate for the scale of the activities at the Facility and the risks that are posed to the environment by these activities.
- 10.1.2. The BAT Requirements for the proposed Facility have been taken from the *BREF for Waste Treatment* (October 2018) and the EA's IPPC S5.06 '*Recovery and disposal of hazardous and non-hazardous waste*' (Issue 5, May 2013)
- 10.1.3. A demonstration of compliance with applicable BAT is provided in Tables 5 and 6.

Table 5: Waste Treatment BREF- General BAT Conclusions

BAT Ref No.	BAT Requirement	Section of EPTR Document
Overall Environmental Performance		
1	<p>In order to improve the overall environmental performance, BAT is to implement and adhere to an EMS that incorporates all of the following features:</p> <ul style="list-style-type: none"> I. commitment of the management, including senior management; II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the Facility; III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment; IV. implementation of procedures; V. checking performance and taking corrective action; VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness; VII. following the development of cleaner technologies; VIII. consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life; IX. application of sectoral benchmarking on a regular basis; X. waste stream management (see BAT 2); XI. an inventory of waste water and waste gas streams (see BAT 3); XII. residues management plan (see description in Section 6.6.5); - n/a XIII. accident management plan (see description in Section 6.6.5); XIV. odour management plan (see BAT 12); - n/a XV. noise and vibration management plan (see BAT 17).- n/a. 	<p>Section 3- Management Techniques & Section 6 – General Requirements</p>
2	<p>In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below:</p> <ul style="list-style-type: none"> a) set up and implement waste characterisation and pre-acceptance procedures; b) set up and implement waste acceptance procedures; c) set up and implement a waste tracking system and inventory; d) set up and implement an output quality management system; e) ensure waste segregation; f) ensure waste compatibility prior to mixing or blending of waste; and g) sort incoming solid waste. 	<p>Section 4 – Operating Techniques</p>

Table 5: Waste Treatment BREF- General BAT Conclusions (Cont.)

BAT Ref No.	BAT Requirement	Section of EPTR Document
Overall Environmental Performance		
4	In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below. (a) optimised storage location; (b) adequate storage capacity; (c) safe storage operation;	Section 4.2. – Proposed Waste Activities
5	In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.	Section 4.2.6. – Waste Acceptance Arrangements Section 4.2.7. Waste Handling, Storage and Processing
Monitoring		
11	BAT is to monitor annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.	Section 9.2. – Energy consumption Section 9.4. – Raw Material Justification Section 9.5. – Waste Minimisation
Emissions to Air		
14	In order to prevent, or where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques listed.	Section 5.5. Fugitive Emissions to Air Dust Management Plan (ECL.088.01.01/DMP)

Table 5: Waste Treatment BREF- General BAT Conclusions (Cont.)

BAT Ref No.	BAT Requirement	Section of EPTR Document
Emissions to water		
19	<p>In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below.</p> <ul style="list-style-type: none"> (c) impermeable surface; (d) techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels; (e) roofing of waste storage and treatment areas; (g) adequate drainage infrastructure; and (h) design and maintenance provisions to allow detection and repair of leaks. 	<p>Section 5.2.- Point Source Emissions to Surface Water, Section 5.3. – Point Source Emissions to Sewer Section 5.6- Section 5.6. – Fugitive Emissions to Surface Water, Foul and Groundwater</p>
20	In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of techniques given.	
Emissions from Accidents and Incidents		
21	<p>In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan.</p> <ul style="list-style-type: none"> (a) protection measures; (b) management of incidental/accidental emissions; and (c) incident/accident registration and assessment system. 	<p>Section 3- Management Techniques</p>
Material Efficiency		
22	In order to use materials efficiently, BAT is to substitute materials with waste.	<p>Section 9.4. – Raw Material Justification Section 9.5. – Waste Minimisation</p>

Table 5: Waste Treatment BREF- General BAT Conclusions (Cont.)

BAT Ref No.	BAT Requirement	Section of EPTR Document
Energy Efficiency		
23	In order to use energy efficiently, BAT is to use both the techniques given below. (a) energy efficiency plan; and (b) energy balance record	Section 9.1. – Energy Efficiency
Reuse of Packaging		
24	In order to reduce the quantity of waste sent for disposal, BAT is to maximise the reuse of packaging.	Section 9.5 – Waste Minimisation
General BAT Conclusions for the Mechanical Treatment of Waste		
25	In order to reduce emissions to air of dust and of particulate-bound metals, PCDD/F and dioxin like PCBs. BAT is to apply BAT 14d and to use one or a combination of the techniques given below: (a) cyclone; (b) fabric filter; (c) wet scrubbing; and (d) water injection into the shredder.	Section 6.1 – Dust Management and Dust Management Plan ECL.088.01.01/DMP)

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements

Ref No.	BAT Requirement	Section of EPTR Document
IPPC S5.06, 2.1 In Process Controls - Section 2.1.1, Pre-Acceptance Procedures to Assess Waste		
1	<p>From the waste disposal enquiry, the Operator should obtain information in writing relating to:</p> <ul style="list-style-type: none"> • The type of process producing the waste; • The specific process from which the waste derives; • The quantity of waste; • Chemical analysis of the waste (individual constituents and as a minimum their percentage compositions); • The form the waste takes (solid, liquid, sludge etc.); • Hazards associated with the waste; and • Sample storage and preservation techniques. 	
2	Unless a sample and analysis has already been completed by a third party and the Operator has a sufficient written information from them, then the Operator should in every case obtain representative sample(s) of the waste from the production process/current holder and compare it against the written description to ensure it is consistent.	
3	Other than for pure product chemicals or laboratory smalls, the chemical analysis should relate to an actual analysis and not simply be based on product data sheets or an extrapolation of information on product data sheets. For example, taking the concentrations as specified and applying a dilution factor is not acceptable.	Section 4.2.4. – Waste Pre-Acceptance Arrangements Section 4.2.5. – Sampling and Testing
4	Wastes should not be accepted at the Facility without a clear method or defined treatment and disposal route being determined in advance and costed before the waste is accepted at the Facility.	
5	The Operator should ensure that the sample is representative of the waste and has been obtained by a person who is technically competent to undertake the sampling process.	
6	<p>The type of information that would demonstrate the reliability of the sample includes:</p> <ul style="list-style-type: none"> • location of sample point; • capacity of vessel sampled; • method of sampling; • number of samples and degree of consolidation; • operating conditions at time e.g. normal operation, shut-down, maintenance and/or cleaning; and • preservation techniques. 	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPC S5.06, Section 2.1.1, Pre-Acceptance Procedures to Assess Waste		
7	Samples should be clearly labelled and any hazard identified.	
8	Sample tracking systems within the Facility should be established and be auditable.	
9	Analysis should be carried out by a laboratory with robust quality assurance and quality control methods and record keeping.	
10	<p>Analysis required will vary depending upon the nature of the waste, the process to be used and what is known about the waste already. Results of analysis should be kept within the tracking system. These details should include:</p> <ul style="list-style-type: none"> • check on constituents declared by waste producer/holder to ensure Permit compliance, treatment plant specification and final disposal; • all hazardous characteristics; • physical appearance; • colour; • pH; • presence, strength and description of odour assessment (note COSHH implications). 	Section 4.2.4. – Waste Pre-Acceptance Arrangements
11	Further analysis may include other parameters relevant to the treatment method or waste stream.	Section 4.2.5. – Sampling and Testing
14	Following characterisation of the waste, a technical assessment should be made of its suitability for treatment or storage to ensure Permit conditions are being met.	
15	There must be a clear distinction between sales and technical staff roles and responsibilities. If non-technical sales staff are involved in waste disposal enquiries, then a final technical assessment prior to approval should be made. It is this final technical checking that should be used to avoid build-up of accumulation of waste.	
16	All records relating to pre-acceptance should be maintained at the Facility for cross-reference and verification at the waste acceptance stage. These records should be kept for a minimum of 3 years.	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPC S5.06, Section 2.1.2, Acceptance Procedure When Waste Arrives At The Facility		
Load Arrival		
	On arrival loads should:	
1	<ul style="list-style-type: none"> be weighed, unless alternative reliable volumetric systems linked to specific gravity data are available; not be accepted into site unless sufficient storage capacity exists, and site is adequately manned to receive waste; have all documents checked and approved, and any discrepancies resolved before the waste is accepted; and have any labelling that does not relate to the contents of the trailer removed before acceptance on site. 	Section 4.2.6. –Waste Acceptance Arrangements
Load Inspection		
3	Visual inspection. Where possible, confirmatory checks should be undertaken before offloading where safety is not compromised. Inspection must in any event be carried out immediately upon offloading at the Facility.	Section 4.2.6. – Waste Acceptance Arrangements
4	Check every container to confirm quantities against accompanying paperwork.	
5	At this stage, the waste tracking system unique reference number should be applied to each container. Each container should be also labelled with the date of arrival on-site.	
7	The inspection, unloading and sampling areas should be marked on a plan and have suitably sealed drainage systems.	Section 4.2.6. – Waste Acceptance Arrangements Section 4.2.7. – Waste Handling, Storage and Processing
Sampling – Checking - Testing of Wastes - Storage		
8	No wastes should be accepted at the Facility without sampling, checking and testing being carried out. Reliance solely on the written information supplied is not acceptable, and physical verification and analytical confirmation are required. All wastes, whether for on-site treatment or simply storage, must be sampled and undergo verification and compliance testing.	Section 4.2.5. – Sampling and Testing Section 4.2.6. – Waste Acceptance Arrangements Section 4.2.9. - Records

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
Sampling – Checking - Testing of Wastes - Storage		
9	<p>The Operator should ensure that waste delivered to the Facility is accompanied by a written description of the waste describing:</p> <ul style="list-style-type: none"> the physical and chemical composition; hazard characteristics and handling precautions; compatibility issues; and information specifying the original waste producer and process. 	
10	<p>On-site verification and compliance testing should take place to confirm:</p> <ul style="list-style-type: none"> the identity of the waste; the description of the waste consistency with pre-acceptance information and proposed treatment method; and compliance with permit. 	<p>Section 4.2.5. – Sampling and Testing</p> <p>Section 4.2.6. – Waste Acceptance Arrangements &</p> <p>Section 4.2.9. - Records</p>
11	The Operator should have clear and unambiguous criteria for the rejection of waste, together with a written procedure for tracking and reporting such non-conformance. This should include notification to the customer/waste producer and the Regulator. Written/computerised records should form part of the waste tracking system information.	
12	Documentation provided by the driver, written results of acceptance analysis, details of offloading point or off-site transfer location should be added to the tracking system documentation.	
13	A record of sampling regime for each load and justification for the selection of this option should be maintained at the Facility.	
14	Wastes must not be deposited within a reception area without adequate space.	Section 4.2.6 - Waste Acceptance Arrangements
IPPC S5.06, Section 2.1.2, Acceptance Procedure When Waste Arrives At The Facility		
16	Should the inspection or analysis indicate that the wastes fail to meet the acceptance criteria, such loads should be stored in a dedicated quarantine area and dealt with appropriately. Such storage should be more a maximum of five working days. Written procedures should be in place for dealing with wastes held in quarantine, together with a maximum storage volume.	<p>Section 4.2.6.</p> <p>Waste Acceptance Arrangements</p>

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
17	If the cause of failure to meet acceptance criteria is due to incompatibility, wastes should be segregated immediately to remove the hazard.	Section 4.2.5. – Sampling and Testing
20	The Facility should have a designated sampling point or reception area. These should be in close but safe proximity to the laboratory/checking facility and the sampling point should be visible (or covered by CCTV), if sampling is not directly supervised by, for example, laboratory staff.	Section 4.2.6. Waste Acceptance Arrangements
21	The offloading, sampling point/reception and quarantine areas should have impervious surface with self-contained drainage, to prevent any spillage entering the storage systems or escaping off-site. Attention should be given to ensuring that incompatible substances do not come into contact resulting from spills from sampling, for example, within a sump serving the sampling point. Absorbents should be made available.	Section 4.2.7. – Waste Handling, Storage and Processing
Waste Rejection Procedures		
34	<p>The operator should have clear and unambiguous criteria for the rejection of wastes, together with a written procedure for tracking and reporting such non-conformance. This should include notification to the customer/waste producer and the Environment Agency. Written/computerised records should form part of the waste tracking system information. The operator should also have a clear and unambiguous policy for the subsequent storage and disposal of such rejected waste. This policy should achieve the following:</p> <ul style="list-style-type: none"> identifies the hazards posed by the rejected wastes; labels rejected wastes with all information necessary to allow proper storage and segregation arrangements to be put in place; and segregates and stores rejected wastes safely pending removal. 	Section 4.2.6. – Waste Acceptance Arrangements
Records		
35	The waste tracking system should hold all the information generated during pre-acceptance, acceptance, storage, treatment and removal off-site. Records should be made and kept up to date on on-going basis to reflect deliveries, on-site treatment and despatches. The tracking system should operate as a waste inventory/stock control system and include requirements listed.	Section 4.2.9. – Records
36	All records relating to pre-acceptance checks should be maintained and kept readily available at the Facility for cross-reference and verification at the waste acceptance stage.	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
37	<p>The system adopted should be capable of reporting on all of the following:</p> <ul style="list-style-type: none"> total quantity of waste present on-site at any one time, in appropriate units; breakdown of waste quantities being stored pending on-site treatment, classified by treatment route; indication of where the waste is located on site relative to the site plan; comparison of the quantity on site against total permitted; comparison of time the waste has been on-site against permitted limit. <p>These records should be held in a designated area, as agreed with the Agency, well removed from hazardous activities to ensure their accessibility during any emergency.</p>	Section 4.2.9. – Records
38	Back-up copies of computer records should be maintained off-site.	
General		
39	Wastes should not be accepted at the Facility without a clear defined method of recovery or disposal being determined and costed and ensuring there is sufficient capacity being available. These checks should be performed before the waste acceptance stage is reached.	Section 4.2.6 - . Waste Acceptance Arrangements
40	The Operator should ensure that the Facility personnel who may be involved in the sampling, checking and analysis procedures are suitably qualified and adequately trained, and that the training is updated on a regular basis.	Section 3.1. – Technical Competence Section 4.2.4. – Waste Pre-Acceptance Arrangements & Section 4.2.6. – Waste Acceptance Arrangements
41	Analysis should be carried out by a laboratory with suitably accredited test methods.	
42	Analysis should be retained on-site for a minimum of two days after the waste has been treated or removed off-site.	
43	Once analysis has confirmed the waste is acceptable, the Operator should only then create a batch for treatment or a load for off-site removal. Once a batch has been assembled for treatment, the operator should create a composite sample for analysis prior to treatment.	
44	There must be a clear distinction between sales and technical staff roles and responsibilities. If non-technical sales staff are involved in waste enquiries then a final technical assessment prior to approval should be made. It is this final technical checking that should be used to avoid build-up of accumulations of wastes and to ensure that sufficient capacity exists.	
IPPC S5.06, Section 2.1.3, Waste Storage		
Offloading/Discharge of Waste		
1	<p>The Operator should have in place a system to ensure that the correct discharge point or storage area is used. The options for this include:</p> <ul style="list-style-type: none"> ticket systems; supervision by site staff and if relevant CCTV; keys; and colour-coded points/hoses or fittings of a specific size. 	Section 4.2.7. – Waste Storage Section 4.2.9 – Records

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

BAT Ref No.	BAT Requirement	Section of EPTR Document
2	Offloading and quarantine points should have an impervious surface with self-contained drainage, to prevent any spillages entering the storage systems or escaping off-site.	Section 4.2.6. – Waste Acceptance Arrangements Section 4.3. – Proposed Infrastructure and Drainage Arrangements
Record Keeping		
5	The Operator should have an internal tracking system which should satisfy the objectives and minimum standards given.	Section 4.2.9. – Records
General Storage Requirements		
6	Storage areas are often the most visible aspects of the Facility. Storage areas should be located away from watercourses and sensitive perimeters, for example, those which may be adjacent to public rights of way, housing or schools, and within the security-protected area of the Facility to prevent vandalism.	Section 4.2.7. – Waste Handling, Storage and Processing
7	Storage areas should be located to eliminate or minimise the double handling of wastes within the Facility.	
8	Storage areas should be clearly marked and signed with regard to the quantity and hazardous characteristics of the wastes stored therein.	
9	The total maximum storage capacity of the site should be clearly and unambiguously stated in writing, accompanied with details of the method used to calculate the volumes held against this maximum and set out in the site plan. The stated maximum capacity of storage areas should not be exceeded and the site plan updated to reflect any changes before they are implemented.	
10	All containers should be clearly labelled with the date of arrival, composition of the waste and a unique reference number or code enabling identification through stock control and cross-reference to pre-acceptance and acceptance records.	
11	Storage area drainage infrastructure should ensure that all contaminated run-off is contained, that drainage from incompatible wastes cannot come into contact with each other and that fire cannot spread between storage/treatment areas via the drainage system.	Section 4.3. – Proposed Infrastructure and Drainage Arrangements Section 5.6. – Fugitive Emissions to Surface Water, Sewer and Groundwater

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
12	Procedures must be in place for the regular inspection and maintenance of storage areas. Inspections should pay particular attention to signs of damage, deterioration and leakage. Records should be kept detailing action taken. Faults must be repaired as soon as practicable. If containment capacity or capability of pavement is compromised, (unless effecting a repair is more expedient and working with wastes in close proximity does not compromise safety), then waste must be immediately removed until the repair is completed.	Section 4.3. – Proposed Infrastructure and Drainage Arrangements
13	There should be daily inspection of the condition of containers and pallets and written records should be kept of these inspections. If a container is found to be damaged, leaking or in a state of deterioration, the contents should be transferred to another container or processed.	Section 5.6. – Fugitive Emissions to Surface Water, Sewer and Groundwater
15	There should be vehicular, for example, forklift, and pedestrian access at all times to the whole of the storage area.	Environmental Risk Assessment ECL.088.01.01/ERA
17	Activities that create a clear fire risk should not be carried out within the storage area, even if it is not formally classified as hazardous. Examples include grinding, welding or brazing of metalwork, smoking, parking of normal road vehicles except while unloading, charging of the batteries of fork lift trucks.	Fire Prevention Plan – ECL.088.01.01/FPP
Turnover		
18	Storage within the reception area should be for a maximum of five working days. Following receipt, wastes should be treated or removed off-site as soon as possible. The total storage time will depend upon the characteristics of a particular site and the waste types being stored.	Section 4.2.7. – Waste Handling, Storage and Processing
Aged Stock		
24	It is important to avoid accumulations of waste, which may in turn lead to deterioration in the container resulting in spillage or, in extreme cases, the deformation of the container to such an extent that it cannot be moved.	Fire Prevention Plan ECL.088.01.01/FPP

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
Bulk Storage Vessels		
44	Bulk storage vessels should be located on an impervious surface that is resistant to material being stored, with sealed construction joints within a bunded area with a capacity of at least 110% of the largest vessel or 25% of the total tankage volume, whichever is greater.	Section 5.6. –Fugitive Emissions to Surface Water, Sewer and Groundwater
45	Vessels supporting structures, pipes, hoses and connections should be resistant to the substance (and mix of substances) being stored. There should be a routine programmed inspection of tanks, mixing and reaction vessels including periodic thickness testing. In the event of damage or significant deterioration, the contents should be transferred to appropriate storage. Inspections carried out by expert staff and written records maintained of inspection and remedial action taken.	
46	Vessels should not be used beyond the specified design life or used in a manner or for substances that they were not designed. Vessels should be inspected at regular intervals, with written records kept to prove that they remain fit for purpose. See HSE Guidance Note PM75.	
47	As a general rule, no open topped tanks, vessels or pits should be used for storage or treatment of hazardous or liquid wastes. Exceptions would require justification in the permit application.	
48	No uncontrolled venting to atmosphere should be allowed, and all vents should be linked to suitable scrubbing and abatement systems. Vapour balance lines should be connected to suitable abatement systems.	
54	Plant and equipment taken out of use should be decontaminated and removed.	Section 6.1. – Dust Management
56	Silos should be equipped with dust abatement systems, level monitors and high level alarms.	
57	Storage bunkers should have extraction systems for particulate abatement or spray damping.	
Tank and Process Pipework Labelling		
58	All vessels should be clearly signed as to their contents and capacity and should have a unique identifier. Tanks should be appropriately labelled.	Section 5.6. –Fugitive Emissions to Surface Water, Sewer and Groundwater
60	Written records of all tanks should be kept as listed in the guidance.	
Other Storage Requirements		
63	Waste or raw materials in non-waterproof packaging should be kept under cover.	Section 4.2.7. – Waste Handling, Storage and Processing
Container Movement		
64	Mobile containers should only be moved between different locations (or loaded for removal off-site) in accordance with written procedures. The waste tracking system should be amended to record these changes.	Section 4.2.9. – Records

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.2.2, Point Source Emissions to Surface Water and Sewer		
2	The following general principles should be applied in sequence to control emissions to water	Section 5.2. – Point Source Emissions to Surface Water
	<ul style="list-style-type: none">• water use should be minimised, and wastewater reused or recycled;	Section 5.3. – Point Source Emissions to Sewer
	<ul style="list-style-type: none">• contamination risk of process or surface water should be minimised;	
	<ul style="list-style-type: none">• where any potentially harmful materials are used measures should be taken to prevent them entering the water circuit.	
IPPCS5.06, Section 2.2.4, Fugitive Emissions to Air		
1	Dust - The following general techniques should be employed where appropriate:	Section 6.1. – Dust Management
	<ul style="list-style-type: none">• covering of skips and vessels	
	<ul style="list-style-type: none">• avoidance of outdoor or uncovered stockpiles (where possible)	
	<ul style="list-style-type: none">• where dust creation is unavoidable, use of sprays, binders, stockpile management techniques, windbreaks and so on	
	<ul style="list-style-type: none">• regular wheel and road cleaning (avoiding transfer of pollution to water and wind blow)	
	<ul style="list-style-type: none">• closed conveyors, pneumatic or screw conveying (noting the higher energy needs), minimising drops. Filters on the conveyors to clean the transport air prior to release	
	<ul style="list-style-type: none">• regular housekeeping	
	<ul style="list-style-type: none">• enclosed silos (for storage of bulk powder materials) vented to fabric filters. The recycling of collected material should be considered under Section 2.6; and	
	<ul style="list-style-type: none">• enclosed containers or sealed bags used for smaller quantities of fine materials.	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.2.5, Fugitive Emissions to Surface Water, Sewer and Groundwater		
	For surfacing:	
3	<ul style="list-style-type: none"> design appropriate surfacing and containment or drainage facilities for all operational areas, taking into consideration collection capacities, surface thicknesses, strength/reinforcement; falls, materials of construction, permeability, resistance to chemical attack, and inspection and maintenance procedures; have an inspection and maintenance programme for impervious surfaces and containment facilities; and unless the risk is negligible, have improvement plans in place where operational areas have not been equipped with: <ul style="list-style-type: none"> an impervious surface spill containment kerbs sealed construction joints connection to a sealed drainage system. 	<p>Section 4.3. –Proposed Infrastructure and Drainage Arrangements</p> <p>Section 5.6. – Fugitive Emissions to Surface Water, Sewer and Groundwater</p>
4	All above ground tanks containing liquids whose spillage could be harmful to the environment should be bunded. Bunds should meet the criteria listed.	
IPPCS5.06, Section 2.3., Management		
Operations and maintenance		
	Effective operational and maintenance systems should be employed on all aspects of the process whose failure could impact on the environment, in particular there should be:	
1	<ul style="list-style-type: none"> documented procedures to control operations that may have an adverse impact on the environment; a defined procedure for identifying, reviewing and prioritising items of plant for which a preventative maintenance regime is appropriate; documented procedures for monitoring emissions or impacts; a preventative maintenance programme covering all plant, whose failure could lead to impact on the environment, including regular inspection of major 'non-productive' items such as tanks, pipework, retaining walls, bunds ducts and filters. 	Section 3.4.2. – Implementation and Operation
2	The maintenance system should include auditing of performance against requirements arising from the above and reporting the result of audits to top management.	Section 3.4.4. – Check

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
Competence and Training		
3	Training systems, covering the following items, should be in place for all relevant staff which cover: <ul style="list-style-type: none">• awareness of the regulatory implications of the Permit for the activity and their work activities;• awareness of all potential environmental effects from operation under normal and abnormal circumstances• awareness of the need to report deviation from the Permit; and• prevention of accidental emissions and action to be taken when accidental emissions occur.	Section 3.1 – Technical Competence Section 3.2. Overview of EMS
4	The skills and competencies necessary for key posts should be documented and records of training needs and training received for these posts maintained.	
5	The key posts should include contractors and those purchasing equipment and materials;	
6	The potential environmental risks posed by the work of contractors should be assessed and instructions provided to contractors about protecting the environment while working on site.	
7	Where industry standards or codes of practice for training exist (e.g. WAMITAB) they should be complied with.	
Accidents/Non Conformances		
8	There should be an accident plan which: <ul style="list-style-type: none">• identifies the likelihood and consequence of accidents; and• identifies actions to prevent accidents and mitigate any consequences.	Section 3.4.2. – Implementation and Operation
9	There should be written procedures for handling, investigating, communicating and reporting actual or potential non-compliance with operating procedures or emission limits	
10	There should be written procedures for handling, investigating, communicating and reporting environmental complaints and implementation of appropriate actions.	
11	There should be written procedures for investigating incidents, (and near misses) including identifying suitable corrective action and following up.	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
Organisation		
13	<p>The company should adopt an environmental policy and programme which:</p> <ul style="list-style-type: none"> • includes a commitment to continual improvement and prevention of pollution; • includes a commitment to comply with relevant legislation and other requirements to which the organisation subscribes; and • identifies, sets, monitors and reviews environmental objectives and key performance indicators independently of the Permit. 	Section 3.3. - Environmental Policy
14	<p>The company should have demonstrable procedures (e.g. written procedures) which incorporate environmental considerations into the following areas:</p> <ul style="list-style-type: none"> • the control of processes and engineering change on the Facility; • design, construction and review of new facilities and other capital projects (including provision of decommissioning) • capital approval; and • purchasing policy. 	Section 3.4.1. – Plan Section 3.4.2. – Implementation and Operation
15	The company should conduct audits, at least annually, to check that all activities are being carried out in conformity with the above requirements. Preferably, these should be independent.	
16	The company should report annually on environmental performance, objectives and targets, and future planned improvements. Preferably, these should be published environmental statements.	
17	The company should operate a formal Environmental Management System. Preferably, this should be registered or certified EMS/ISO 140001 system (issued and audited by an accredited certification body).	Section 3.2. – Overview of EMS
18	<p>The company should have a clear and logical system for keeping records of, amongst others:</p> <ul style="list-style-type: none"> • policies; • roles and responsibilities; • targets; • procedures; • results of audits; • results of reviews. 	Section 3.4.4. – Check

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.4., Raw Materials		
1	The Operator should maintain a list of raw materials and their properties as noted above.	Section 9.4 – Raw Material Justification Section 4.2 – Proposed Waste Activities
2	The Operator should have procedures for the regular review of new developments in raw materials and for the implementation of any suitable ones with an improved environmental profile.	
3	The Operator should have quality-assurance procedures for controlling the impurity content of raw materials.	
4	The Operator should complete any longer-term studies needed into the less polluting options and should make any material substitutions identified.	
IPPCS5.06, Section 2.6., Waste Recovery or Disposal		
1	Waste production should be avoided wherever possible. Any waste that is produced should be recovered, unless it is technically or economically impractical to do so.	Section 9.5. – Waste Minimisation
2	Where waste must be disposed of, the Operator should provide a detailed assessment identifying the best environmental options for waste disposal – unless the Regulator agrees that this is unnecessary.	
IPPCS5.06, Section 2.7., Energy		
Basic Energy Requirements (1)		
1	The Operator should provide the energy consumption information, shown in the table on page 86 of IPPC S5.06 Sector Guidance Note, in terms of delivered energy and also, in the case of electricity, converted to primary energy consumption.	Section 9.1. – Energy Efficiency
2	The Operator should provide the following Specific Energy Consumption (SEC) information. Define and calculate the SEC of the activity (or activities) based on primary energy consumption for the products or raw material inputs that most closely match the main purpose or production capacity of the Facility. Provide a comparison of SEC against any relevant benchmarks available for the sector.	
3	The Operator should provide associated environmental emissions.	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
Basic Energy Requirements (2)		
	Operating, maintenance and housekeeping measures should be in place in the following areas, where relevant:	
1	<ul style="list-style-type: none"> operation of motors and drives; lubrication to avoid high-friction losses; boiler operation and maintenance e.g. optimising excess air; and other maintenance relevant to the activities within the Facility. 	
2	Basic low cost physical techniques should be in place to avoid gross inefficiencies. These should include insulation, containment methods (such as seals and self-closing doors) and avoidance of unnecessary discharge of heated water or air (fitting simple control systems such as timers and sensors).	Section 9.1. – Energy Efficiency Section 9.2. – Energy Consumption
3	Energy efficient building services should be in place.	
4	Energy management techniques should be in place, in particular, the need for monitoring of energy flows and targeting of areas for reductions.	
5	<p>An energy efficiency plan should be provided that:</p> <ul style="list-style-type: none"> Identifies all techniques relevant to the Facility, estimates of CO₂ savings that would be achieved by each measure over its lifetime; and in the case that the activities are not covered by CCA or DPA, provides information on the equivalent annual costs of implementation of the technique, the costs per tonne CO₂ saved and the priority for implementation. 	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.8., Accidents		
1	A formal structured accident management plan ("AMP") should be in place.	
	The AMP should include: A – Identification of hazards to the environment posed by the Facility using a methodology akin to a Hazop study. Areas to consider include, but should not be limited to, the following: <ul style="list-style-type: none"> • arrangements for the receipt, and checking of incoming wastes, including rejection and quarantine; • arrangements for the storage, segregation and separation of differing waste types; • procedures for the internal transfers, including "bulking up" of waste materials; • transfer of substances (e.g. filling or emptying vessels); • overfilling of vessels; • emissions from plant or equipment (e.g. leaking from joints, over-pressurisation of vessels, blocked drains); • failure of containment (e.g. physical failure or overfilling of bunds or drainage sumps); • failure to contain fire waters; • wrong connections made in drains or other systems; • incompatible substances allowed to come into contact; • unexpected reactions or runaway reactions; • failure of main services (e.g. power, steam, cooling water); • operator error; and • vandalism. 	
2		
	B – assessment of the risks. The hazards having been identified, the process of assessing the risks should address six basic questions: <ol style="list-style-type: none"> 1. How likely is the particular event to occur? 2. What substances are released and how much of each? 3. Where do the released substances end up? 4. What are the consequences? 5. What are the overall risks? 6. What can prevent or reduce the risk? 	
3		
	The depth and type of assessment will depend on the characteristics of the Facility and its location. The main factors to take into account include the scale and nature of hazards, the risks to receptors, the nature of the Facility and complexity of activities and the relative difficulty in deciding and justifying the adequacy of the risk-control technique.	Section 3.4.2. – Implementation and Operation
4		

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.8, Accidents		
5	C - Identification of the techniques necessary to reduce the risks. The listed techniques are relevant to most Facilities:	
	• there should be an up to date inventory of substances, present or likely to be present, which could have environmental consequences if they escape.	Section 3.4.2. – Implementation and Operation
	• up to date site plan showing the precise location of wastes having specific hazard characteristics with clear identification of the perimeters of the various designated storage areas and their maximum storage capacity;	
	• procedures for checking and handling raw materials and wastes to ensure compatibility with other substances;	
	• storage arrangements for raw materials, products and wastes should be designed and operated to minimise risks to the environment;	
	• automatic process controls backed up by manual supervision to minimise the frequency of emergency situations and to maintain control;	
	• physical protection should be in place where appropriate;	
	• appropriate secondary containment;	
	• techniques and procedures should be in place to prevent overfilling of tanks;	
	• security systems to prevent unauthorised access;	
	• formal systems for logging and recording all incidents etc.;	
	• procedures for responding to and learning from incidents etc.;	
	• roles and responsibilities to personnel involved in incident management;	
	• guidance available on how each accident scenarios might be best managed;	
	• procedures should be in place to avoid incidents occurring as a result of poor communication during maintenance periods;	
	• safe shutdown should be in place;	
	• communication channels with emergency services and other relevant authorities should be established and available for use in the event of an incident. Procedures should be in place to include assessment of harm.	
	• appropriate control technique should be in place to limit the consequences of an accident, such as fire walls etc.	
	• personnel training requirements should be identified and training provided;	
	• the systems for the prevention of fugitive emissions are generally relevant (Section 2.2.4 and Section 2.2.5);	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.8, Accidents		
5(cont.)	<ul style="list-style-type: none"> • duplicate or standby plant should be provided where necessary, with maintenance and testing to the same standards as the main plant; • spill contingency procedures should be in place to minimise accidental release and then to prevent their entry into water; • process waters, potentially contaminated site drainage waters, emergency firewater, chemically-contaminated waters and spillages should be contained and, where necessary, routed to the effluent system and treated before emission to controlled waters or sewer. Sufficient storage should be provided to ensure that this can be achieved. Any emergency firewater collection system should take account of the additional firewater flows and fire-fighting foams, and emergency storage lagoons may be needed to prevent contaminated firewater reaching controlled waters; • spillage prevention controls must be in place during the transfer of substances (for example, transfer of bulk liquid waste from tanker to storage vessels). <ul style="list-style-type: none"> ○ The weakest link and subsequently the main source of spillage during transfer from the vehicle to storage arises from the transfer hoses. This is due to either: ○ “tanker drive-off” - a vehicle pulling away whilst still coupled (systems should be in place to prevent this); ○ or because the hose couplings have become damaged or are incompatible. Although the spillages tend to be relatively small, measures should be taken to ensure that the couplings are the correct fit and system. This will prevent the coupling loosening or becoming detached, and in turn will also be helped by the Facility providing and maintaining its own hoses; ○ A more serious event would occur if the coupling were unable to withstand the maximum shut valve pressure of the transfer pump; ○ Although the volume lost during routine operations due to ill-fitting or damaged hoses may be relatively small, persistent spillage may have a cumulative effect on the surface of the area, which in the long term may damage the surface and lead to a fugitive emission; ○ spillages of this nature may also be a source of odour (see Section 2.2.6 on page 72) and represent poor “housekeeping” practice, requiring constant attention and cleaning. Protection of the transfer hose may not be necessary where a gravity feed system is in place. It will however still be important to maintain a sound coupling at each end of the transfer hose; and ○ a more acute accident situation may arise due to the failure of plant or equipment. This may include the failure of a pump seal or the blockage of a filter pot commonly used at transfer points. The prevention of these situations should be addressed by the provision of routine maintenance. 	Section 3.4.2. – Implementation and Operation

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
IPPCS5.06, Section 2.8, Accidents		
5 (cont.)	<ul style="list-style-type: none"> ○ A further type of acute incident is associated with the failure of the seal on the road tanker. The prevention of such an incident is outside the control of the Operator of the Facility (though not necessarily beyond that of the company that operates the Facility). Some provision made within the Facility for emergency storage for leaking vehicles. ○ in addition to accidents connected with some failure in the transfer equipment, measures should be taken to ensure that the correct waste is discharged to the correct transfer point and that the waste is then transferred to the correct storage point. In order to prevent an unauthorised discharge, a lockable isolating valve should be fitted to loading connection. It should be kept locked during periods when there is no supervision of the unloading points. ○ drainage from discharge points can be connected or transferred to relevant storage for wastes that have been sampled and checked. ● unloading/movement of drums and containers: <ul style="list-style-type: none"> ○ typically drums and containers are delivered on wooden pallets and the pallets are unloaded by forklift. The drums are usually secured together often by shrink-wrap. All pallets should be sound and undamaged and forklift drivers should be trained in the handling of palletised goods. ○ any damaged pallets should be replaced on arrival and not transferred into storage. Transfer of damaged pallets may lead to other pallets being stored on top, resulting in further damage and possible collapse of the stack ○ adequate space should be provided within drum storage areas and drivers should be adequately trained to minimise forklift truck damage to the integrity of drums. ● accumulations of liquids in bunds, sumps, etc., should be dealt with promptly. ● such accumulations requiring removal should be analysed to ensure the correct disposal route, for example, pH, COD, heavy metals and other known contaminants from the spillage. 	Section 3.4.2. – Implementation and Operation
IPPCS5.06, Section 2.9, Noise		
1	The Operator should employ basic good practice measures for the control of noise, including adequate maintenance of any parts of plant or equipment whose deterioration may give rise to increases in noise (for example, bearings, air handling plant, the building fabric, and specific noise attenuation kit associated with plant or machinery).	Section 6.3. – Noise Management
2	The Operator should employ such other noise control techniques necessary to ensure that the noise from the Facility does not give rise to reasonable cause for annoyance, in the view of the Regulator. In particular, the Operator should justify where Rating Levels (LAeq, T) from the Facility exceed the numerical value of the Background Sound Level (LA90, T).	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
3	Further justification will be required should the resulting field rating level (LAR,TR) exceed 50 dB by day and a facade rating level exceed 45 dB by night, with day being defined as 07:00 to 23:00 and night 23:00 to 07:00.	Section 6.3. – Noise Management
4	In some circumstances “creeping background” (i.e. creeping ambient) may be an issue. Where this has been identified in pre-application discussions or in previous discussions with the local authority, the Operator should employ such noise control techniques as are considered appropriate to minimise problems to an acceptable level with the BAT criteria.	
5	Noise surveys, measurements, investigations (e.g. on sound power levels of individual items of plant) or modelling may be necessary for either new or for existing Facilities, depending upon the potential for noise problems. Where appropriate, the Operator should have a noise management plan as part of its management system.	
IPPCS5.06, Section 2.10 Monitoring		
1	Monitoring should generally be undertaken during all phases of operation (i.e. commissioning, start up, normal operation and shutting down) unless the Regulator agrees that it is inappropriate.	Section 8 – Monitoring Section 5.6. – Fugitive Emissions to Surface Water, Sewer and Groundwater
Monitoring and Reporting of Air Emissions		
6	Where appropriate, periodic visual and olfactory assessment of releases should be undertaken to ensure that all final releases to air should be essentially colourless, free from persistent trailing mist or fume and free from droplets.	
Monitoring and Reporting of Waste Emissions		
10	For waste emissions, the following should be monitored and recorded: <ul style="list-style-type: none">the physical and chemical composition of waste;its hazard characteristics; andhandling precautions and substances with which it cannot be mixed.	Section 9.5. – Waste Minimisation
Environmental Monitoring (beyond the Facility)		
1	The Operator should consider the need for environmental monitoring to assess the effects of emissions to controlled water, groundwater, air or land, or emissions of noise or odour.	Section 6 – General Requirements

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
Monitoring of Emissions to Air		
5	Daily visual monitoring to air for smoke, dust, litter, plumes and daily olfactory odour monitoring	Environmental Risk Assessment ECL.088.01.01/ERA
Monitoring of Process Variables		
1	Some process variables may affect the environment and these should be identified and monitored as appropriate – resource use: energy consumption.	Section 9.2. – Energy Consumption
IPPCS5.06, Section 2.11 Closure		
1	Operations during the life of the IPPC Permit should not lead to any deterioration of the site if the requirements of the other sections of this and the specific-sector notes are adhered to. Should any instances arise which have, or might have, impacted on the state of the site, the Operator should record them along with any further investigation or ameliorating work carried out. This will ensure that there is a coherent record of the state of the site throughout the period of the IPPC Permit. This is as important for the protection of the Operator as it is for the protection of the environment. Any changes to this record should be submitted to the Regulator.	Section 3.4.1. – Plan
2	Care should be taken at the design stage to minimise risks during decommissioning. For existing Facilities, where potential problems are identified, a programme of improvements should be put in place to a timescale agreed with the Regulator.	
3	A site closure plan should be maintained to demonstrate that, in its current state, the Facility can be decommissioned to avoid any pollution risk and return the site of operation to a satisfactory state. The plan should be kept updated as material changes occur.	
IPCC S5.06, Section 4.2. The Waste Management Licensing Regulations		
1	In relation to activities involving the disposal or recovery of waste, the Regulators are required to discharge their functions in accordance with the relevant objectives as set out in Schedule 4 of the Waste Management Licensing Regulations 1994. Objectives are as follows:	Section 4.2.7. Waste Handling, Storage and Processing Environmental Risk Assessment ECL.088.01.01/ERA
2	<ul style="list-style-type: none">Ensuring the waste is recovered or disposed of without endangering human health and without using process or methods which could harm the environment and in particular without risk to water, air, soil, plants or animals or causing nuisance through noise or odours or adversely affecting the countryside or places of special interest;	
	<ul style="list-style-type: none">Implementing, as far as material, any plan made under the plan-making provisions	

Table 6: IPPC S5.06 Guidance Document - Techniques for Pollution Control: BAT Requirements (Cont.)

Ref No.	BAT Requirement	Section of EPTR Document
3	Operators should identify any development plans made by the local planning authority, including any waste local plan and Waste Strategy 2000 commenting on the extent to which the proposals accord with the contents of any such plan.	Section 2.2. – Planning
IPCC S5.06, Section 4.3. The Habitats Regulations		
1	Operators should provide an initial assessment of whether the Facility is likely to have a significant effect on any European site in the UK (either alone or in combination with other relevant plans or projects) and, if so, an initial assessment of the implications of the Facility for any such site. The application of BAT is likely to have gone some way towards addressing the potential impact of the Facility on European sites and putting into place techniques to avoid any significant effects. The Operator should provide a description of how the BAT assessment has specifically taken these matters into account, bearing in mind the conservation objectives of any such site.	Environmental Risk Assessment ECL.088.01.01/ERA
2	European sites are defined in Regulation 10 of the Habitats Regulations to include Special Areas of Conservation (SACs); sites of community importance (sites that have been selected as candidate SACs by member states and adopted by the European Commission, but which are not yet formally classified); and Special Protection Areas (SPAs). It is also Government policy (set out in PPG 9 on nature conservation) that potential SPAs and candidate SACs should be considered to be European sites for the purposes of Regulation 10.	
4	The Regulator will need to consider the Operator's initial assessment. If it concludes that the Facility is likely to have a significant effect on a European site, then the Regulator will need to carry out an “appropriate assessment” of the implications of the Facility in view of that site's conservation objectives. The Regulations impose a duty on the Regulator to carry out these assessments, so it cannot rely on the Operator's initial assessments. Therefore, the Regulator must be provided with any relevant information upon which the Operator's assessment is based.	

APPENDIX I

ENVIRONMENTAL POLICY



BY APPOINTMENT TO
HER MAJESTY THE QUEEN
ANIMAL BEDDING
R. A. & C. E. PLATT LTD
WREXHAM



Environmental Policy Statement

Platts Agriculture Limited is committed to protecting and enhancing the environment and to improving the quality of life for people both now and in the future. By minimising the impacts of our activities, we will contribute to the improvement of the global environment through local action and will deliver sustainable development by recognising the links between the environment, people and our economy.

It is our objective to meet all registration requirements and meet or exceed compliance of all environmental legislation that relates to our business. We will seek continuous improvement in our environmental performance and management through regular (at least annual) review and revision of this policy; and recognise the need to provide the resource required to make this policy and our arrangements effective.

To meet the aims of this policy we are committed to:

- Critical examination of the impact that our policies and programmes have on the environment and timely actions to minimise these impacts
- Integration of environmental best practice in corporate and specific policies where appropriate
- Continual improvement in our environmental performance
- Measurement against comparable authorities and other benchmarks
- Raising awareness and encouraging participation among members and employees in environmental matters
- Spreading and sharing knowledge across the business through environment champions in all departments
- Ensuring purchasing decisions are mindful of sustainability and environmental impacts
- Working with partners, businesses and other organisations who demonstrate commitment to reduce their own environmental impact
- Increasing understanding of environmental issues, ensuring everyone has access to accurate information, which encourages sustainable lifestyle changes and encourages focussed voluntary action
- Minimising waste by evaluating operations and ensuring they are as efficient as possible.
- Minimising vehicle emissions through the selection and use of vehicles and restricting work related travel to essential journeys.
- Actively promote recycling both internally and amongst customers and suppliers.
- Source and promote a product range to minimise the environmental impact of both production and distribution.
- Use an accredited program to offset the greenhouse gas emissions generated by our activities.

Signed: *Medens*

Position: Managing Director

Date: 10/06/2020

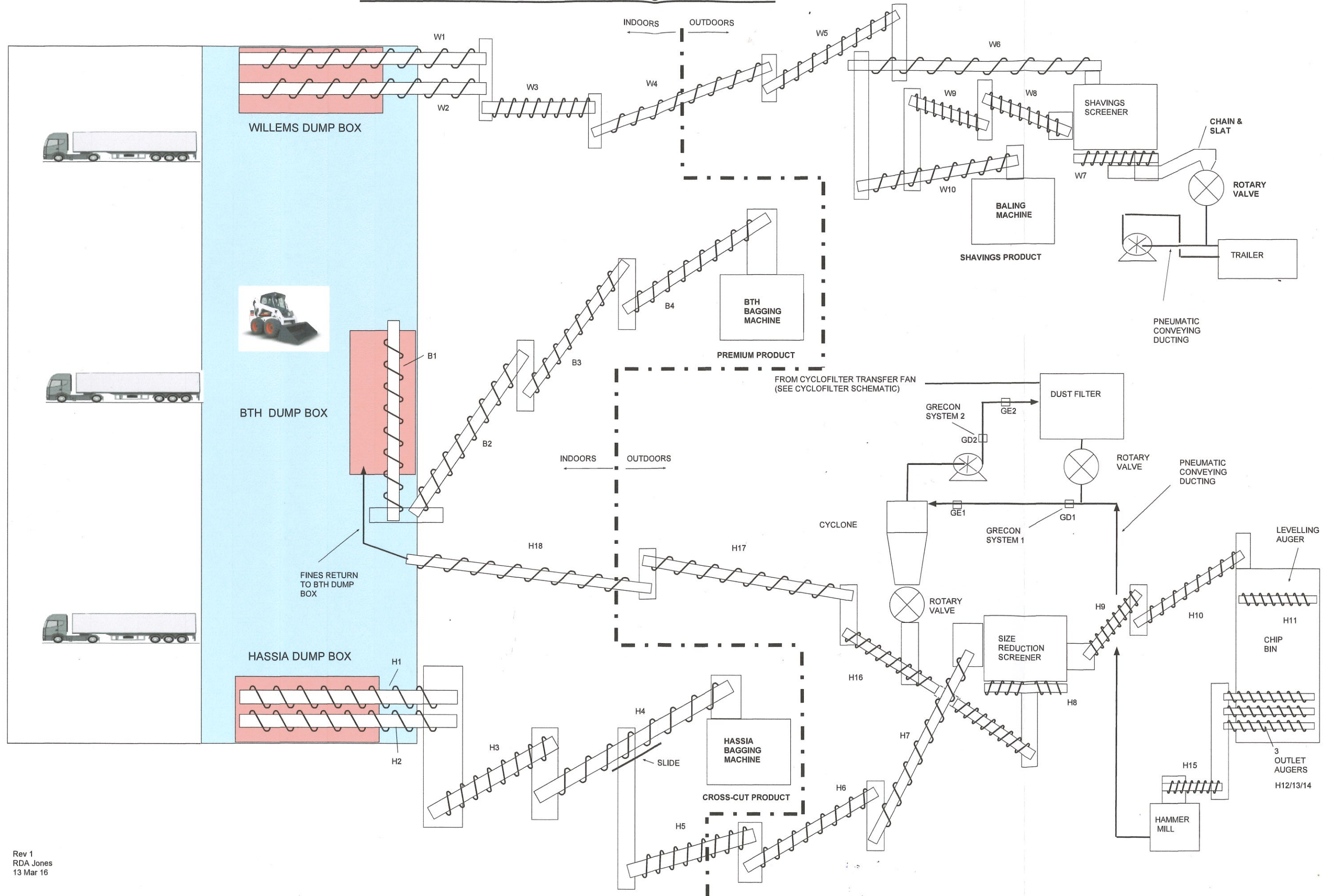
T. 01978 854666 | www.plattsanimalbedding.co.uk | sales@plattsanimalbedding.co.uk

[@PlattsBedding](#) [Platts Animal Bedding](#) [@PlattsBedding](#)

APPENDIX II

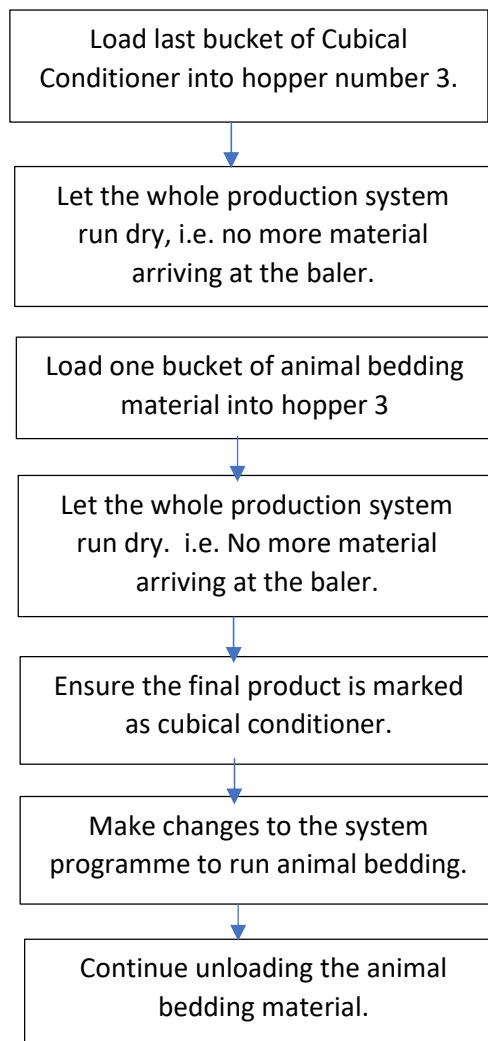
OVERALL PROCESS FLOW SCHEMATIC

OVERALL PROCESS FLOW SCHEMATIC

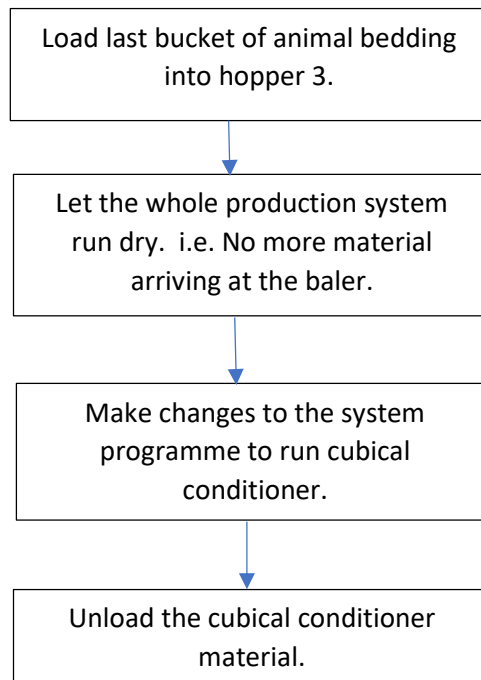


APPENDIX III FLOW CHART

Changing production between Cubical Conditioner to Animal Bedding



Changing production between Animal Bedding and Cubical Conditioner



APPENDIX IV TRADE EFFLUENT CONSENT/ LETTER OF AUTHORISATION

Platts Agriculture Ltd,
Miners Park,
Llay Industrial Estate,
Llay,
Wrexham,
LL12 0PJ

18th March 2021

Dear Occupier,

Ref:- Disposal of Wastewater from vehicle washing at Platts Agriculture Ltd, Llay Industrial Estate, Llay, LL12 0PJ.

Thank you for your recent enquiry regarding an authorisation to discharge trade effluent to the public foul sewer from the above address. Based on the information provided, I can confirm that authorisation is given to discharge the trade effluent into the public foul sewer, subject to the following conditions and not otherwise:

1. The premises from which the trade effluent may be discharged is: Platts Agriculture Ltd, Llay Industrial Estate, Llay, LL12 0PJ.
2. The trade effluent to be discharged is derived from vehicle washing.
3. The maximum volume of trade effluent that may be discharged shall not exceed 2.4 m³ per day.
4. The highest rate at which the trade effluent may be discharged shall not exceed 0.3 l/sec.
5. The trade effluent is expected to contain traces of suspended solids and traces of the detergents, all heavily dilute, biodegradable & non-acidic. No gross solids may be discharged to sewer.
6. The pH of the effluent must be between 5 and 10.
7. There must be no visible signs of oil or grease in the discharge.
8. The wastewater must be discharged to the public sewer via a Silt/Oil Interceptor tank. The tank must be maintained regularly, and maintenance records including Duty of Care paperwork must be kept and available for inspection on request.

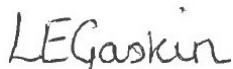
9. Please ensure that the discharge is made to foul sewer only and that there is no risk of the contamination of any surface water drainage.
10. Flows must be introduced into the public sewer in such a way that will not affect the free flow of its contents, for example, settlement of suspended solids or surcharging upstream.
11. A 3 metre gravity section must be incorporated into the design before connection to the public sewer should the discharge be pumped.
12. There will be no attempt to identify the volumes of domestic sewage and this trade effluent for charging purposes. Both volumes will be discharged at the current domestic rate with no minimum charge for trade effluent.
13. This permission is given on the understanding that:
 - a) it may be reviewed from time to time in accordance with the frequency applying in respect of a trade effluent consent issued under the Water Industry Act 1991, section 124.
 - b) Dwr Cymru-Welsh Water may review its Trade Effluent Policy and require a review of this permission subject to the restrictions in a) above.
 - c) If the nature of the discharge is changed then Dwr Cymru-Welsh Water must be informed of this and shall be entitled to review the permission.

-2-

The standard trade effluent consent application fee, currently £358.12 (zero rated for VAT), is payable for the processing of the authorisation application as per the Dwr Cymru-Welsh Water Scheme of Charges. You will be invoiced for this amount in due course.

In the meantime, if you have any queries or should the operation change in any way so as to affect the nature and volume of wastewater for disposal, please contact Raymond Jones, Trade Effluent Officer on 07824845827.

Yours sincerely



Louise Gaskin

Wastewater Science Manager