

# **Environmental Permit Application EPR/LB3206LE/A001**

PDA Plastics Ltd (PDA): PDA Plastics LTD, Commissioners Road, Strood, Rochester, Kent. ME2 4EB

### **Waste Activities**

- PDA wishes to regularise the waste activities being carried out on the Site, namely the storage and treatment of PVC window frames in accordance with The Environment Agency's 'Non-packaging plastics: quality protocol' to 'BS EN 15346:2007 Characterisation of poly (vinyl chloride) (PVC) recyclates'.
- PDA propose to accept and treat up to 15,000 tonnes of waste per year.
   Waste will be predominately treated on the day of receipt.
- Storage volumes of waste will not exceed 1,000 tonnes at any one time. PDA
  Plastics LTD endeavour to process waste in the minimal possible time to
  reduce storage volume and allow for stock rotation.
- The proposed Permit boundary is shown on the Site Boundary Map below.
- Waste will be stored and treated on the Site. Treated material will be sent off Site to PDA customers. Waste is therefore stored prior to each treatment process and not stored for any significant time once fully treated.
- The following waste treatment activities are carried out on the Site:
  - Storage of incoming PVC window frames in yard area within a dedicated bay.
  - Storage of shredded window frames in yard area within dedicated bays.
  - Storage of handpicked waste (e.g. metal, wood, non-PVC plastics) within containers.
  - Shredding (to a particle size of <120cm).</li>
  - Magnet separation of Ferrous metals.
  - Eddy current separator (separation of waste by magnetising the Non-Ferrous particles mixed in the PVC)
  - o Optical sorting of shredded material.
  - Physical sorting activities.
  - Granulation (to a particle size of <10mm).</li>
  - Optical sorting of granulated material.
  - Pulverisation (to a particulate size of <1000um)</li>
- A process flow chart is provided below which shows the proposed treatment process to be carried out on the site.
- Waste is only accepted from account holding customers who are vetted by the sales team following PDA Plastics LTD QP03 quality control procedure below.
- QP06 control of non-conforming waste is also listed below.

UPVC Waste Material arrives on site from vetted account holding customers



Offcut material is stored in containers

Offcuts are loaded into a hopper ready for granulation.

Offcuts are conveyed along a picking belt and any non PVC items are removed

Offcuts pass under a magnetic detection belt which stops if metals are detected allowing the operator to remove metallic substances

The offcut material then passes into a granulator which size reduces the PVC to around 10mm

The material is then conveyed out of the granulator into a holding hopper

The material is then augur feed into a dedust unit

The granules are feed into a bulk bag ready for further processing. The dust is feed into a bulk bag for disposal.

Frames material are stored in dedicated bays

Frames are loaded into a mobile shredder for size reduction

Shredded frames are ejected from the shredder into a dedicated bay

Shredded material is then loaded into a hopper ready to run on the PC line

The shredded material then runs along a conveyor belt passing under two magnets where ferrous metal is magnetised and ejected into bins

The material passes over a 10mm vibrating screen where small particles of waste is ejected into bins

The shredded material then runs along another belt and onto the ECS where non-ferrous metal is ejected into bins

The shredded material is then feed through an optical sorter, the reject material goes into bins for further sorting and the accept material is conveyed along a belt to a further metal separator and manned picking belt.

The shredded material passes under a magnetic detection belt which stops if metals are detected allowing the operator to remove metallic substances



The shredded material then passes into a granulator which size reduces the PVC to around 10mm

The granulated material is feed into a holding hopper and auger feed into the float sink line.

The material is passed through a washing tank.
The material that floats is ejected into a waste
bin and the remainder of the granulated material
is conveyed through a dryer and into a holding
hopper.

The material is then conveyed into the colour sorter. The colour sorter ejects the coloured and white material into separate hoppers.

The coloured material is then feed into bulk bag for storage or into the pulveriser hopper ready for further size reduction.

The white material is then fed into bulk storage bags, tied and a bag cover is placed over the bag ready for delivery to PDA customers.

The coloured material is then feed into the pulveriser and micronized.

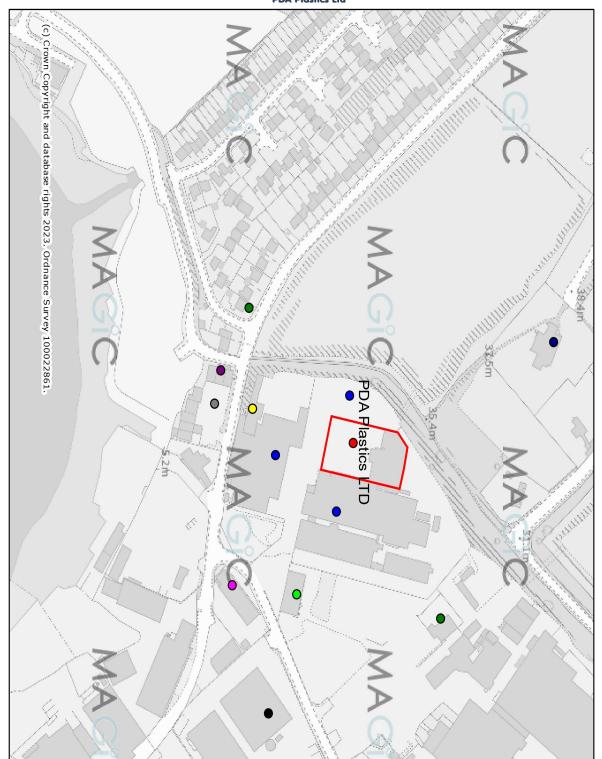
The micronized material then passes through a 700um sieve and oversize material is ejected.

The oversize material is conveyed into bulk bags ready for delivery to PDA customers.

The micronized material is then conveyed into bulk bags ready for delivery to PDA customers.



# PDA Plastics LTD ME2 4EB





PDA PLASTICS LTD QUALITY PROCEDURE			QP03 Quality Control		
					Created on: 1 <sup>st</sup> August 2022
		Paul Alexander	Tony Cattini	Next Review Date: August 2023	
No	Quality Procedure		Key Points		
1.0	Waste Suppliers Vetting		All waste suppliers are fully vetted by the sales team. A member of the sales team will visit the supplier and inform what wastes are accepted at the PDA site.		
1.1	Supplier setup		All waste suppliers are required to have an account setup with PDA plastics prior to acceptance of any waste.		
2.0	Waste is delivered to site		Waste is delivered to site in a variety of different vehicles:  • Walking floor trailers  • Tippers  • Roro skips  • vans  • Bins  • Bags		
2.1	The Yard Operator will supervise the waste being off loaded		If non-conforming waste is discovered QP06 will be followed.		
3.0	PDA Plastics has its own waste collection team		The waste collection team visit suppliers of plastic waste to collect their offcut and frames material. The relevant paperwork is issued to the waste producer.		
3.1	Collection Team experience		The collection team are fully aware of what waste is accepted and what to do if waste does not conform to PDA Requirements.		
3.2	The waste collection team weigh all collected waste materials		When the waste collection team have finished their daily round, they return to the yard and all waste is weighed on the weighbridge.		
4.0	Waste is offloa	Waste is offloaded		The collected waste is offloaded into the correct waste streams ready for processing.	



# QP06 Control of Non-Conforming product



# 1. PURPOSE

To ensure that defective product or material is withheld from inadvertent use.

### 2. RESPONSIBILITY AND APPLICABILITY

The Managing Director is responsible for ensuring that all relevant personnel understand this procedure. The Managing Director or his nominee is responsible for ensuring that the procedure is applied. The procedure will apply to all issues raised during the operations of PDA Plastics Limited.

### 3. PROCEDURE

The quality management system manual is supported by a non-conformance reporting

process, which is used to record details of problems for each of the following categories:

- 1. Customer and stakeholder complaints
- 2. Supplier/Sub-Contractor
- 3. Internal Non-Conformance (including audit/assessment discrepancies)

The spreadsheet contains relevant information related to the problem and the main areas are:

Nature of the problem – brief details on what went wrong.

Root cause – What caused the failure.

Corrective action – What can be done to minimise the effects of the non-conformance.

Preventive Action – What can be done to prevent reoccurrence.



All non-conformances raised are also recorded in the Site Diary.

## **Customer Complaints**

The recording of customer complaints is described in Operating Procedure ...

### Supplier/Sub-Contractor

When a problem develops that is the responsibility of a supplier or a sub-contractor, the Operations Director will be responsible for entering relevant details in the Site diary. The Supplier/Sub-Contractor will be contacted and their response details will be logged.

### Internal

Defective product or material will be detailed in the Site Diary. This is the responsibility of the Operations Director or his nominee.

Non-conforming product will be clearly identified. The Production Director or his nominee will be responsible for this action. Non-conforming product will be segregated from normal production until it is decided on what action to take. These actions will be recorded in the Site Diary.

The following procedure shall be adhered to when non-conforming materials are identified within delivered loads of waste materials.

### Waste load rejection procedure

Vehicle arrives on site. Report to the weighbridge office.

The Waste Transfer Note is checked in accordance with the Waste Transfer Note checklist by the Duty of Care Responsible Person (DoCRP).

If the waste description is not satisfactory the DoCRP will question the vehicle driver to see if they can clarify the description. The EWC code will also be checked at this time. If neither of the above clarifies the identity of the waste an inspection of the waste will be carried out where possible.

If the waste inspection proves that the waste is an acceptable waste stream and meets the waste acceptance criteria (WAC) it will be accepted for off-loading and a note will be made in the Site diary to confirm acceptance by the DoCRP. The record in the site diary will detail all relevant information to include any changes to documentation.

The waste producer may be contacted and advice given regarding the correct EWC, waste description etc. and any other issues with the load.



If waste cannot be inspected prior to off-loading and the documentation is incorrect the waste producer may be contacted to clarify the issues. If this cannot be achieved and does not give PDA Plastics Limited a level of confidence that the waste will be acceptable the load may be rejected prior to off-loading.

In cases where the load is tipped and the waste does not meet the WAC the vehicle will be re-loaded when possible, and the load will be rejected. Contact will be made with the waste producer advising them of the situation and reasons for load rejection. A note will be made in the site diary accordingly.

When non-compliant waste is tipped and cannot be re-loaded the waste will be segregated with the aim to salvage as much recyclable material as reasonably practicable. Safety and financial feasibility will be taken into account. Non-recyclable material will be loaded directly into containers in preparation for either off site disposal or return to the producer. The producer will be contacted by management and discussion held regarding the above and any financial compensation shall be agreed by both parties.

If a small amount of non-compliant waste is identified within the load it will be a management decision as to the acceptance or rejection of the load.

Waste will be quarantined when no immediate agreement is made with the producer or until such time as and when a safe and authorised route of disposal is found.

Quarantine areas will be allocated according to the material type, quantity, handling capability and timescales of when the waste will remain on site.

Quarantine areas will be clearly marked and labelled with waste type, waste producer, PDA Plastics Limited responsible person and contact number.

The Site Diary will be periodically reviewed for underlying trends and/or weaknesses and presented to the Management Review.

# Issues raised by the Assessment Body

Issues raised by the Assessment Body during their assessments will be detailed on the assessment report. The issue raised will be discussed by relevant members of Management and the 'Root Cause' and 'Corrective Action' details will be entered accordingly.



# **Internal Audit Discrepancies**

On completion of internal audits non-conformances and/or observations will be recorded. Corrective/Preventative Actions will be discussed with the Auditee and details will be entered into the relevant section.

The Management Representative or his nominee will implement any changes to procedures or working practices found necessary as a result of carrying out corrective actions at an appropriate time, in accordance with Operating Procedure.

Non-conformance will be discussed at the Management Review Meeting and any follow up action will be recorded in the minutes.